Amplifier 70FA930/

00S/01S/05S/10S

Service
Service
Service

ServiceManual

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GB 4822 725 23902

PHILIPS

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SPECIFICATION

General:

Mains voltage	:220V 50Hz for/00 :240V 50Hz for/05/10 :115/230V 50Hz for/01
Power consumption	:≤ 300W at 2x60W output power :≤ 20W at stand by
Dimensions:(wxhxd)	:435x124x300 mm

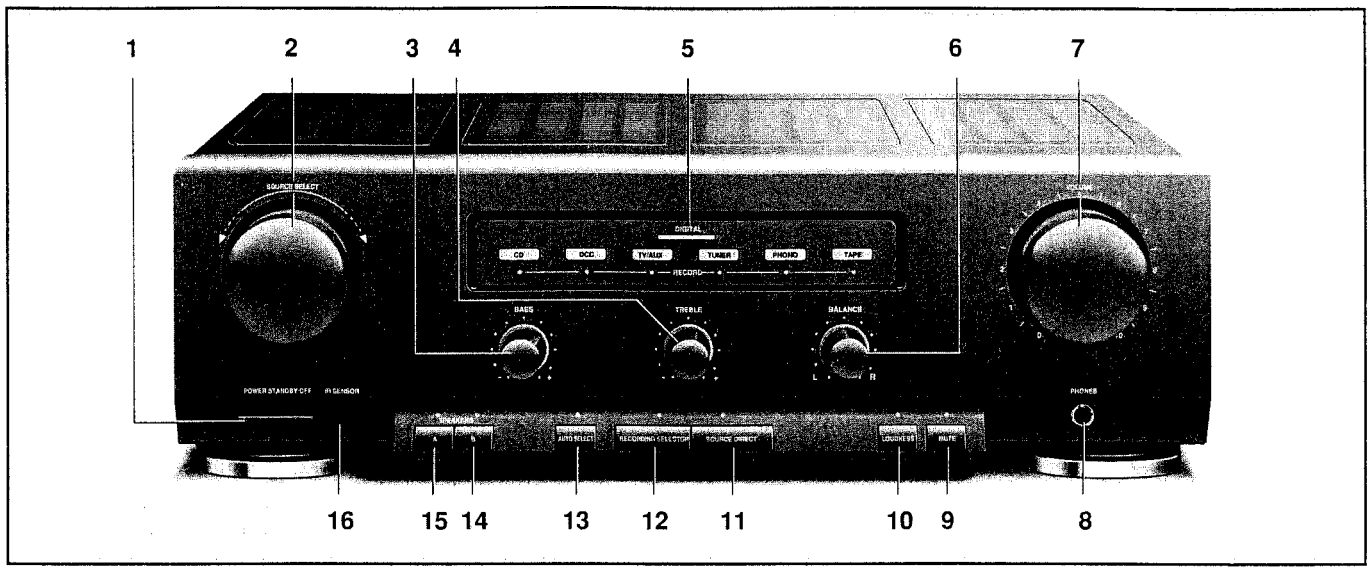
Amplifier:

Output power & Distortion (D)	:2x60W at 8Ω D=≤0,7%(IEC) :2x55W at 8Ω D=≤0,03% (at 1kHz) :2x50W at 8Ω D=≤0,09% (20Hz...20kHz)
Music power	:2x160W
Sign.Noise:	
Phone input (5mv)	:≥83dB (A-curve weighted)
Other inputs (500mv)	;≥100dB (A-curve weighted)
Crosstalk :	
Between channels	:≥60dB (100Hz.....10kHz)
source	:≥65dB (100Hz.....10kHz)
Headphone	:6,3mm stereo jack
Output voltage	:≥ 5V EMF value
Output impedance	:120Ω ±10%
Frequency response	:20Hz -20kHz ≤1dB
Tone controle	:Bass +10dB to -10dB ±2dB at 80Hz :Treble +10dB to -10dB ±2dB at 10kHZ :Loudness +6dB ±2dB volume ≤-40dB at 100Hz +4dB ±1,5dB volume ≤-40dB at10kHz
Input sensitivity	:Tuner 150mV Ri ≥ 20kΩ :TV/VCR 150mV Ri ≥ 20kΩ :CD 150mV Ri ≥ 20kΩ :Tape 150mV Ri ≥ 20kΩ :DCC 150mV Ri ≥ 20kΩ :Process 150mV Ri ≥ 20kΩ :Phone/MM 2,5mV Ri ≥ 47kΩ/220pf
Output voltage	:TV/VCR 150mV Ro < 2k5 :Tape 150mV Ro < 2k5 :DCC 150mV Ro < 2k5 :Process 150mV Ro < 2k5

Digital recorder selector:

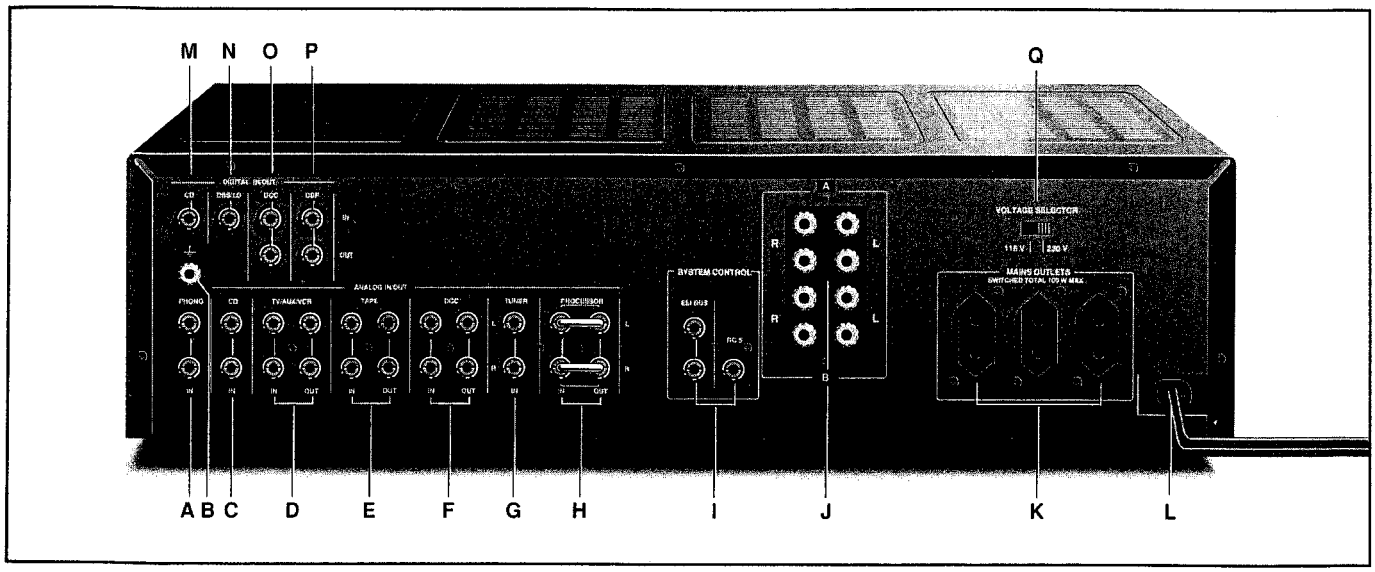
input	:impedance 75Ω :sensitivity 200 ...500mV peak-peak
output	:impedance 75Ω :level 500mV peak-peak
bitrate	:2...3MBit/sec
input type	:unbalanced
output type	:unbalanced

CONTROLS



			Pos.nr.
1)	Standby + acknowledge led		D6648
	Power off/standby button		1525
2)	Source sel.knob + Mag.Touch		1605
3)	Bass knob		3651
4)	Treble knob		3652
5)	Display window and indication led		
	Digital source indication window		1620
	CD indication window		1624
	CD record source led (red)		D6642
	DCC indication window		1621
	DCC record source led (red)		D6643
	TV/AUX indication window		1626
	TV/AUX record source led (red)		D6644
	Tuner indication window		1623
	Tuner record source led (red)		D6645
	Phone indication window		1622
	Phone record source led (red)		D6646
	Tape indication window		1625
	Tape record source led (red)		D6647
6)	Balance knob		3603
7)	Volume knob		3601
8)	Headphone		1601
9)	Mute button	+ Red indic.led	1611 + D6640
10)	Loudness button	+ Red indic.led	1608 + D6635
11)	Source direct but.	+ Red indic.led	1606 + D6636
12)	Rec.sel.button	+ Red indic.led	1612 + D6641
13)	Auto-select button	+ Red indic.led	1607 + D6639
14)	Speakers B-button	+ Red indic.led	1609 + D6638
15)	Speakers A-button	+ Red indic.led	1610 + D6637
16)	IR-receiver eye		6700

CONNECTIONS



			Pos.nr.
A)	Phone	input	1401
B)	Phone	ground	
C)	CD	input	1401
D)	TV/AUX/VCR	input	1401
	AUX/VCR	output	1401
E)	Tape	input	1402
	Tape	output	1402
F)	DCC	input	1402
	DCC	output	1402
G)	Tuner	input	1403
H)	Processor	in	1403
	Processor	out	1403
I)	Easy link	Bus	1261
	RC 5	Bus	1262
J)	Speaker system A Right		1264
	Speaker system A Left		1264
	Speaker system B Right		1263
	Speaker system B Left		1263
K)	Switched AC outleds		1926-27-28
L)	Fixed mainscord		
M)	CD digital	input	1477
N)	DBS/LD digital	input	1477
O)	DCC digital	input	1475
	DCC digital	output	1475
P)	DSP digital	input	1475
	DSP digital	output	1475
Q)	Voltage selector (for/01 only)		

Service Test Program

Processor Test

The test can be called up by pressing the keys Loudness and mute at te same time when te amplifier is switched on.The following lamps and leds will now be lit. Step A (fig 1)

When any key is pressed the following lamps and leds will now lit. Step B (fig 1) Press again a key to step F and check every step. (fig 1)

When a key is pressed after step F the volume knob turns for about 4 seconds right and 4 seconds left. After the volume controle check a eeprom check is started. When after 0.2 seconds the magic touch is used to wake up the amplifier,the amplifier will come up with setting G (fig 1)

When setting G is wrong check eeprom!!

Steps	A	B	C	D	E	F	G
Lamps							
CD	on	off	off	off	off	off	off
DCC	off	on	off	off	off	off	off
TV/AUX	off	off	on	off	off	off	off
TUNER	off	off	off	on	off	off	off
PHONE	off	off	off	off	on	off	off
TAPE	off	off	off	off	off	on	on
Rec.Leds							
CD	off	off	off	off	off	on	off
DCC	off	off	off	off	on	off	off
TV/AUX	off	off	off	on	off	off	off
TUNER	off	off	on	off	off	off	off
PHONE	off	on	off	off	off	off	off
TAPE	on	off	off	off	off	off	on
Source Leds							
St/BY	on	off	on	off	on	off	off
Speak.A	off	on	off	on	off	on	on
Speak.B	on	off	on	off	on	off	off
Auto sel	off	on	off	on	off	on	on
Rec.sel	on	off	on	off	on	off	off
Sour.Dir.	off	on	off	on	off	on	on
Loudness	on	off	on	off	on	off	off
Mute	off	on	off	on	off	on	on

GB

Safety regulations require thatthe set be restored to its original condition and that parts which are identical with those specified be used.

NL

Veiligheidsbepalingen vereisen dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizione originali e che iano utilizzati pezzi di ricambiago identici a quelli specificati.

F

Les normes de sécurité exigent que lappareil soit remis à létat d'origine et que soient utilisées les pieces de rechange identiques à celles spécifiées.

Pour votre sécurité, ces documents doivent etre utilisés par des specialistes agrées, seuls habilités à réparer votre appareil en panne.

Quiescent Current

SK.... SWITCH	SIGNAL	TO	VOLUME	ADJUST	OSILLOSCOPE	D.C.METER INDICATOR
STAND - BY				L ch R 3285		L ch. 1 2 DC 6 mV
				R ch. R 3286		R ch. 3 4 DC 6 mV

- Check for good thermal contact between power transistor and heatsink.
- Mains Voltage 220V /00 240V /05 5%
- Ambient temperature =20° 5° and heatsink must be atambient temperature.
- Set volume position to minimum.
- Disconnect speakers or place the set on stand-by position.
- Trimpotmeter in clock wize position.
- The adjustment must be finished for both channels 20sec after power on.

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

ESD

(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

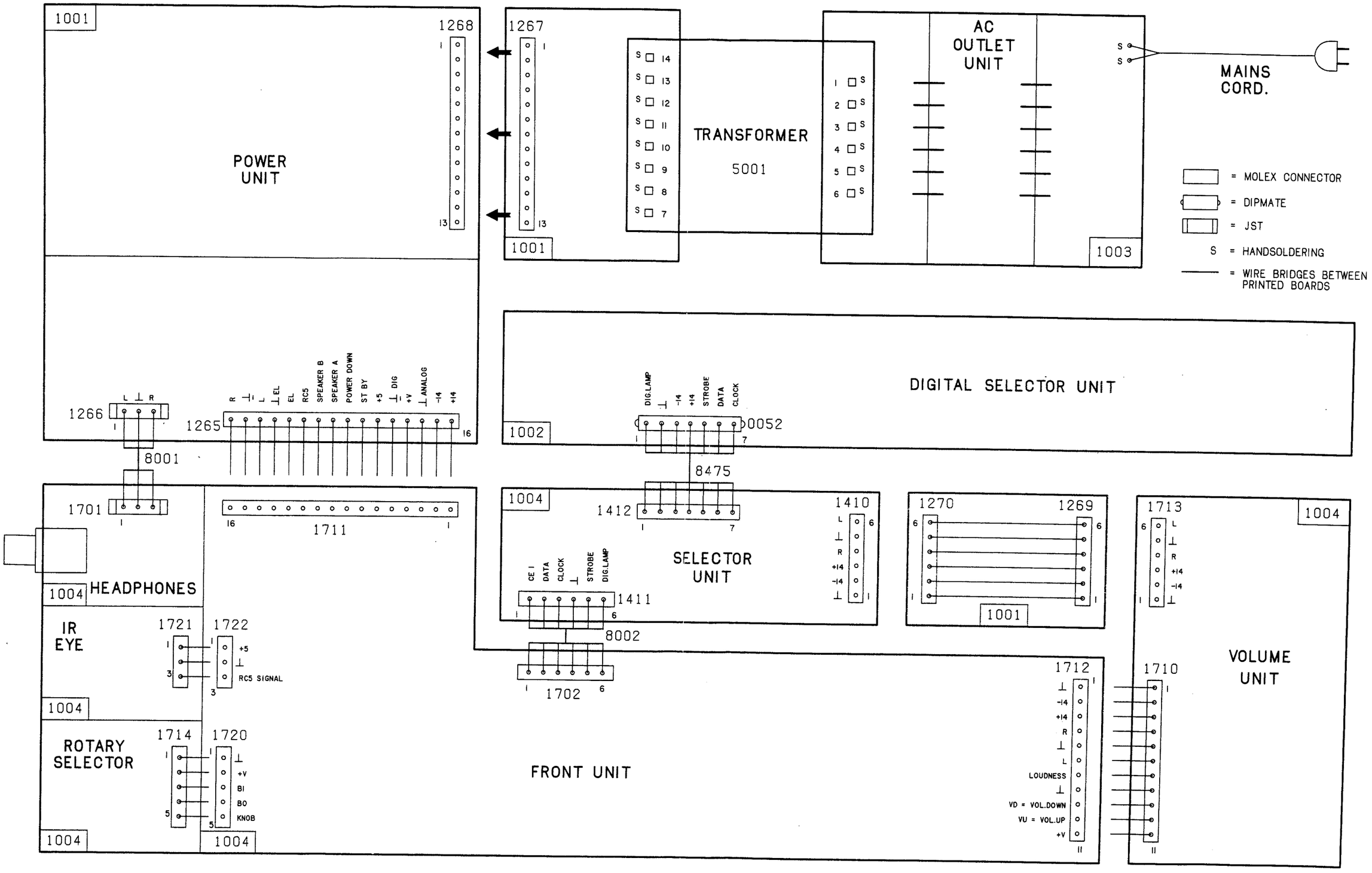
Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(D) WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren.
Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.
Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.


1001
1268
1
13
POWER
UNIT
1267
1
13
1001
S 14
S 13
S 12
S 11
S 10
S 9
S 8
S 7
TRANSFORMER
5001
1 S
2 S
3 S
4 S
5 S
6 S
AC
OUTLET
UNIT
S
S
MAINS
CORD.
1003
= MOLEX CONNECTOR
= DIPMATE
= JST
S = HANDSOLDERING
= WIRE BRIDGES BETWEEN PRINTED BOARDS
1266
L ⊥ R
1265
R ⊥ L ⊥EL EL RC5 SPEAKER B SPEAKER A POWER DOWN ST BY +5 ⊥DIG +V ⊥ANALOG -14 +14
16
8001
DIGITAL SELECTOR UNIT
1002
DIG.LAMP ⊥ -14 +14 STROBE DATA CLOCK
0052
7
8475
1701
1
16
1711
1
1004
1412
1
7
SELECTOR
UNIT
1410
L
⊥
R
+14
-14
⊥
6
1
CE I DATA CLOCK ⊥ STROBE DIG.LAMP
1411
1
6
8002
1702
1
6
1270
1269
6
1
1001
1713
1004
L
⊥
R
+14
-14
⊥
VOLUME
UNIT
1710
1712
⊥
-14
+14
R
⊥
L
LOUDNESS
⊥
VD = VOL.DOWN
VU = VOL.UP
+V
11
HEADPHONES
1004
IR
EYE
1721
1722
+5
⊥
RC5 SIGNAL
1004
ROTARY
SELECTOR
1714
1720
⊥
+V
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TV/AUX	off	off	on	off	off	off	off
TUNER	off	off	off	on	off	off	off
PHONE	off	off	off	off	on	off	off
TAPE	off	off	off	off	off	on	on
Rec.Leds							
CD	off	off	off	off	off	on	off
DCC	off	off	off	off	on	off	off
TV/AUX	off	off	off	on	off	off	off
TUNER	off	off	on	off	off	off	off
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				R ch. R 3284		R ch. ◇3 ◇4 DC 12 mV

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- Mains Voltage 220V /00 240V /05 5%
- Ambient themperature =20° 5° and heatsink must be atambient temperature.
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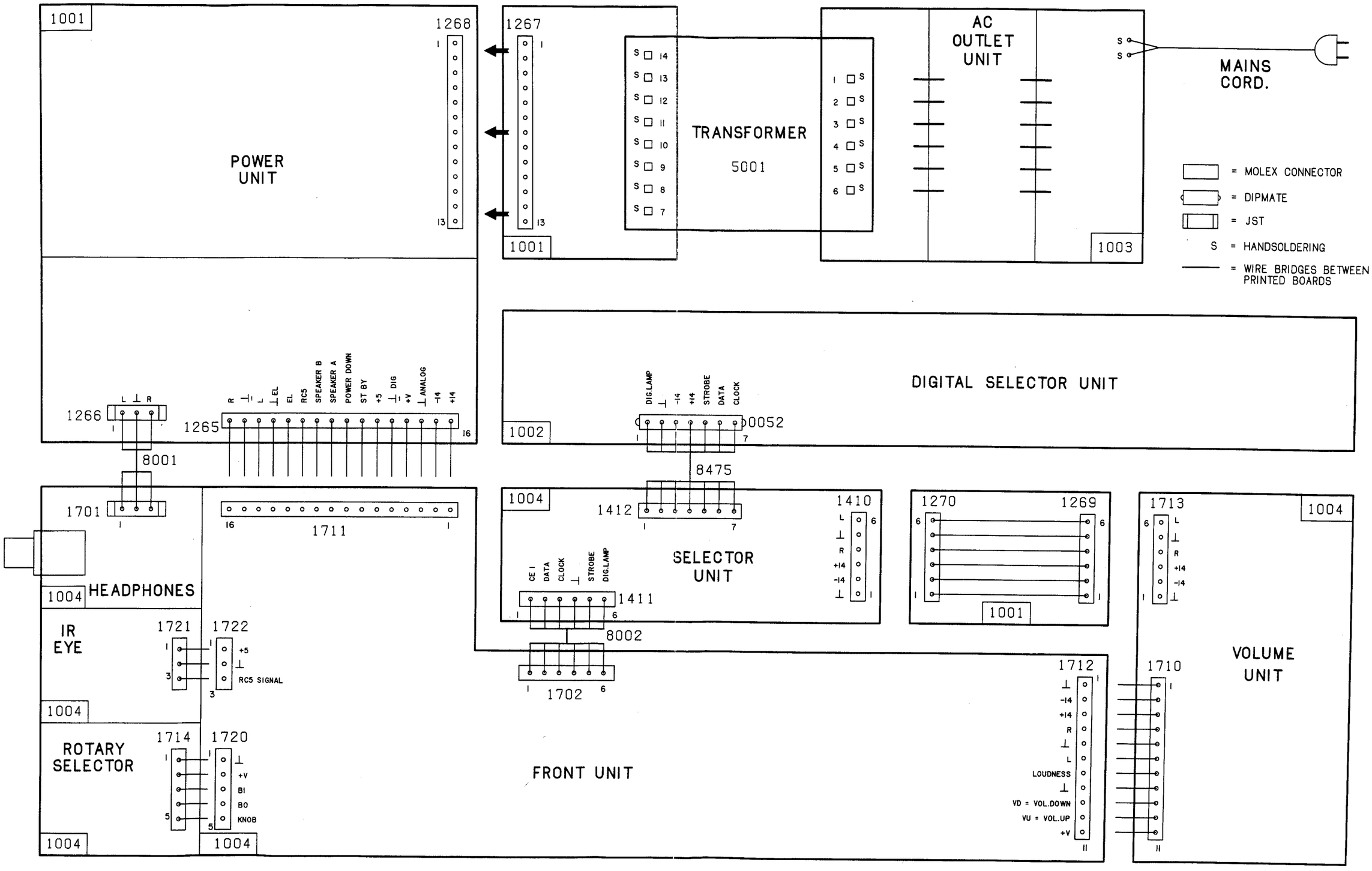
1001
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8475
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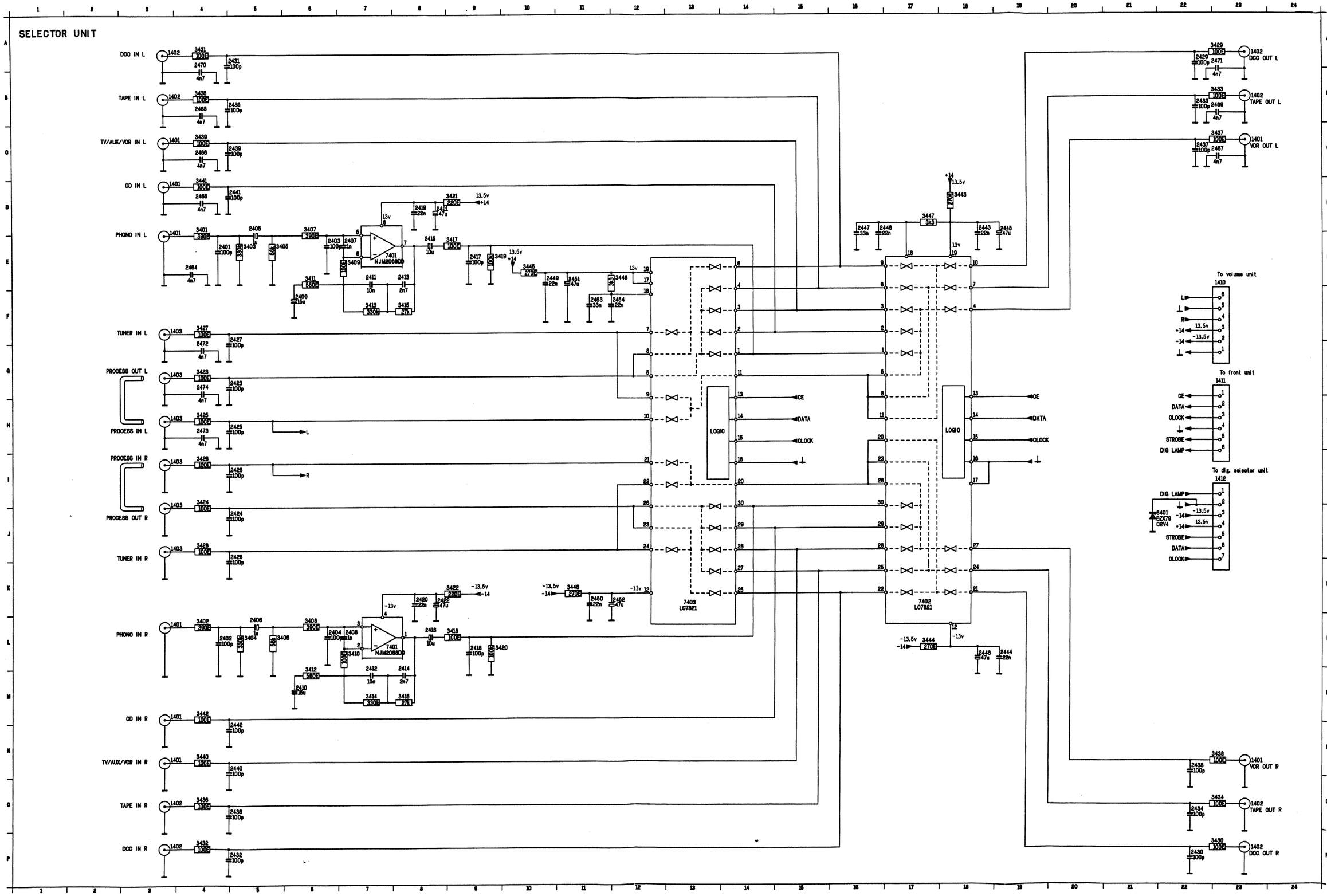
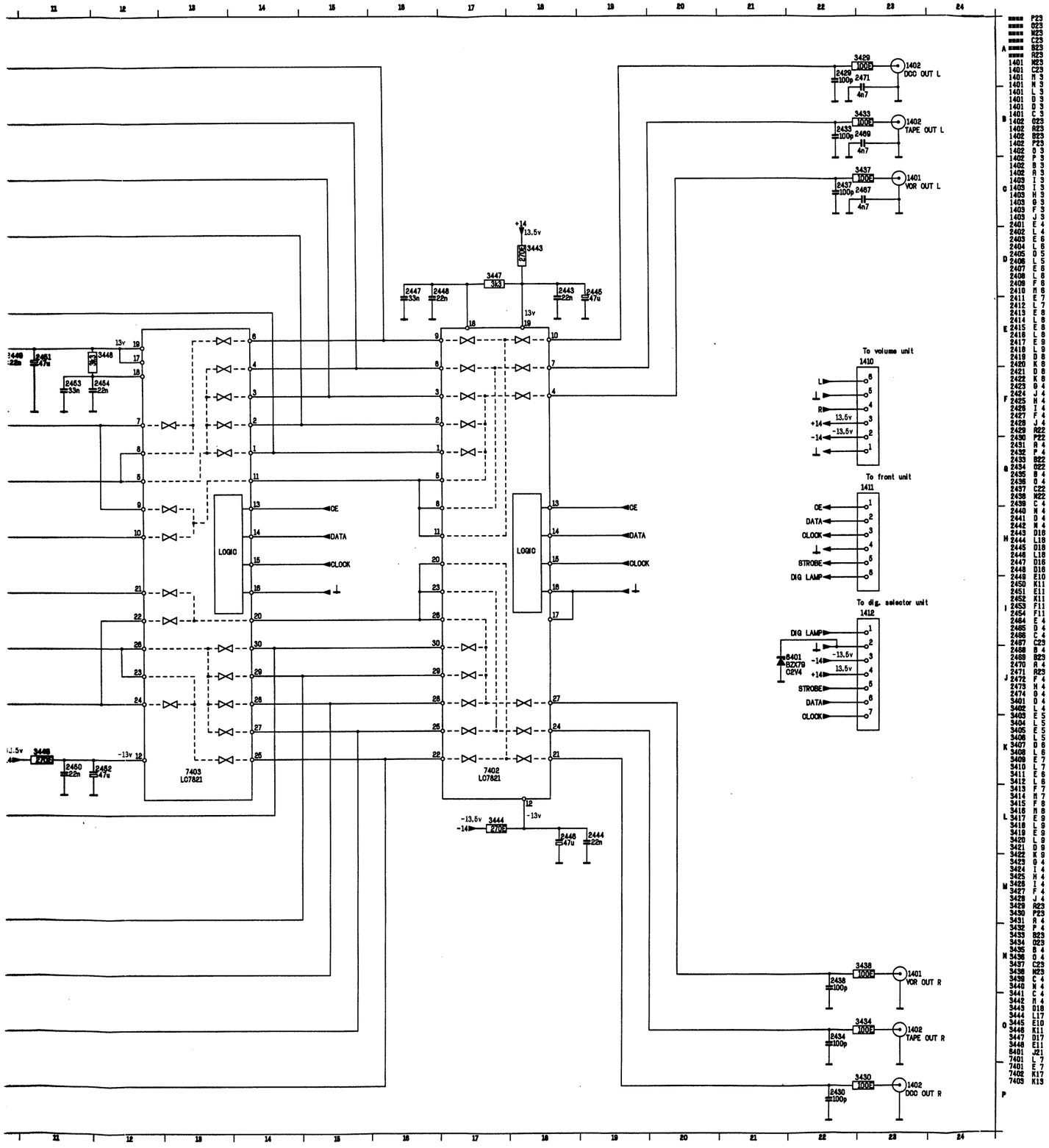
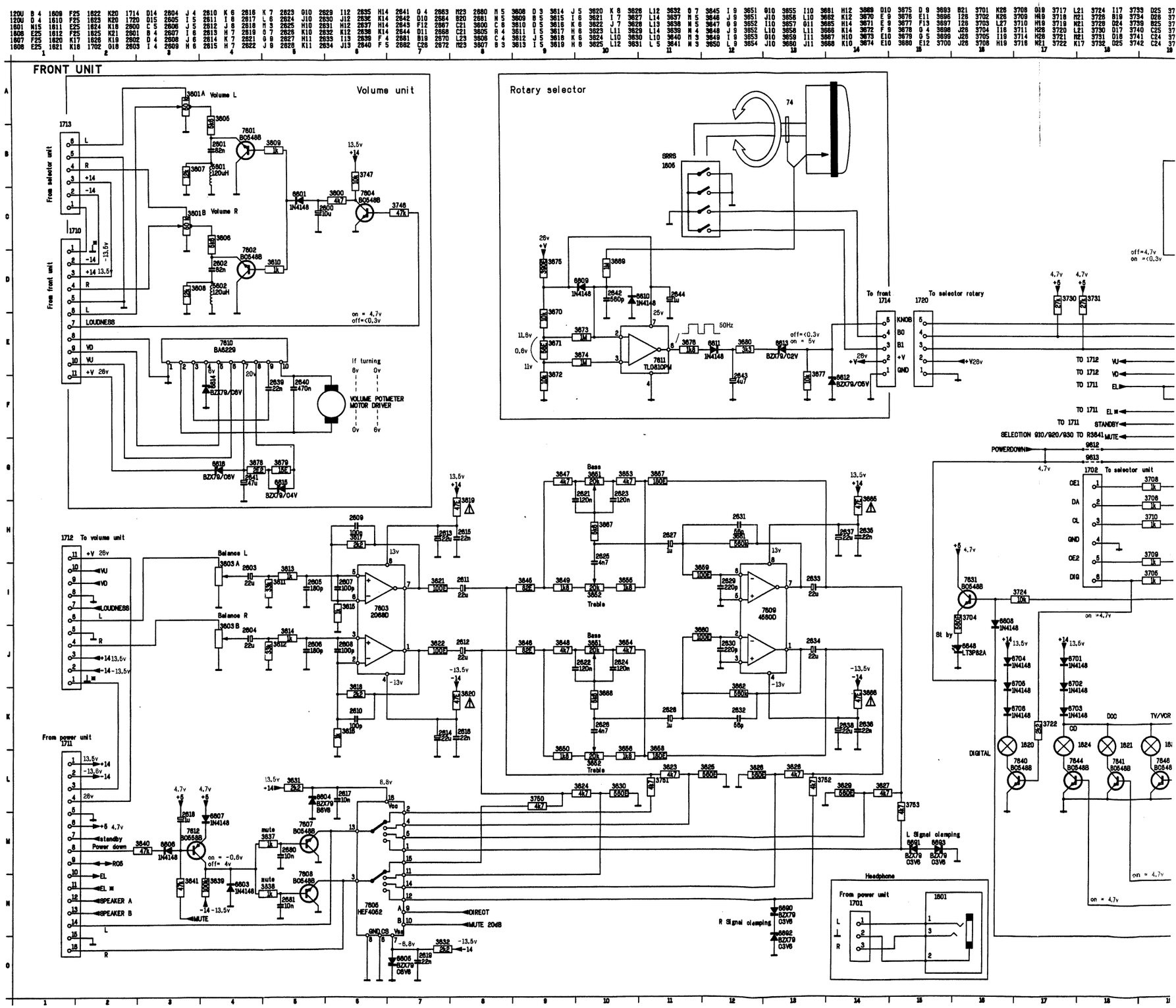
1711
16
1004
1412
1410
L ⊥ R +14 -14 ⊥
1004
HEADPHONES
CE I DATA CLOCK ⊥ STROBE DIG.LAMP
1411
SELECTOR UNIT
1270
1269
1001
1713
1004
IR EYE
1721
1722
+5 ⊥ RC5 SIGNAL
8002
1702
1712
⊥ -14 +14 R ⊥ L LOUDNESS ⊥ VD = VOL.DOWN VU = VOL.UP +V
1710
VOLUME UNIT
1004
ROTARY SELECTOR
1714
1720
⊥ +V BI BO KNOB
1004
1004
FRONT UNIT

SELECTOR UNIT



ES-UNIT OVERLAY RED
3104-217-29300.SERV C.A.D. 91-10-09


3429 100R 1402 DCO OUT L
2429 100p 2471 4n7
3433 100R 1402 TAPE OUT L
2433 100p 2469 4n7
3437 100R 1401 VOR OUT L
2437 100p 2467 4n7
+14 13.5v 3443 220R
3447 3k3
2447 33n 2448 22n 2443 22n 2445 47u
13v
3448 3k3
2453 33n 2454 22n
2451 47u
LOGIC
OE
DATA
CLOCK
7403 LC7821
7402 LC7821
-13.5v 3446 270R 2450 22n 2452 47u -13v
-13.5v 3444 270R -13v 2446 47u 2444 22n
To volume unit 1410
L
R
+14 13.5v
-14 -13.5v
To front unit 1411
CE
DATA
CLOCK
STROBE
DIG LAMP
To dig. selector unit 1412
DIG LAMP
-13.5v
-14
8401 BZX79 C2V4
+14 13.5v
STROBE
DATA
CLOCK
3438 100R 2438 100p 1401 VOR OUT R
3434 100R 2434 100p 1402 TAPE OUT R
3430 100R 2430 100p 1402 DCO OUT R



ES-UNIT MARKLAY RED
3104-217-29300.PROC.SERV C.A.D. 91-10-09

Volume unit

Volume L

Volume R

on = 4,7v
off=<0,3v

VOLUME POTMETER MOTOR DRIVER

If turning 6v 0v / 0v 6v

Rotary selector

74

SRR8 1805

To front 1714

To selector rotary 1720

KNOB B0 B1 +V GND

+V26v

50Hz

off=<0,3v on = 5v

Bass 3851 20k

Treble 3852 20k

Balance L

Balance R

7603 2058D

7609 4560D

7605 HEF4052

DIRECT

MUTE 20dB

L Signal clamping

R Signal clamping

Headphone

From power unit 1701

1601

7650 MC68HC05C

RESET

off=4,7v on =<0,3v

4MHz

IR EYE

6700 SP1U520X

RC5

IRQ RC5

PB2 PB1 PB0 PA2 PA1 PA0

PB4 PB6 PB7 PC5 PC4 PA6 PC7 PC6 PA7

PD1 PD2 PD3 PA3 PB3 PD7 PD4 PD5 PA4 PA5 PD0 PC1 PC2 PC3 PD0 PA7

TO 1712 VU VD

TO 1711 EL TONE EL M STANDBY MUTE

SELECTION 910/920/930 TO R3641

POWERDOWN

1702 To selector unit

OE1 DA CL GND OE2 DIG

8t by

DIGITAL

CD DCO TV/VCR TUNER PHONO TAPE

7647 PO74HOT4094

7648 PO74HOT4094

NM93013

1806 DIRECT
1807 ESI
1808 LOUDNESS
1809 B
1810 A
1811 MUTE
1812 ROS

SPEAKER A TO 1711
SPEAKER B TO 1711
MUTE-20dB TO 107606
LOUDNESS TO 1712
DIRECT TO 107605

ROS CD
ROS DCO
ROS TV/VCR
ROS TUNER
ROS PHONO
ROS TAPE

SELECTOR UNIT

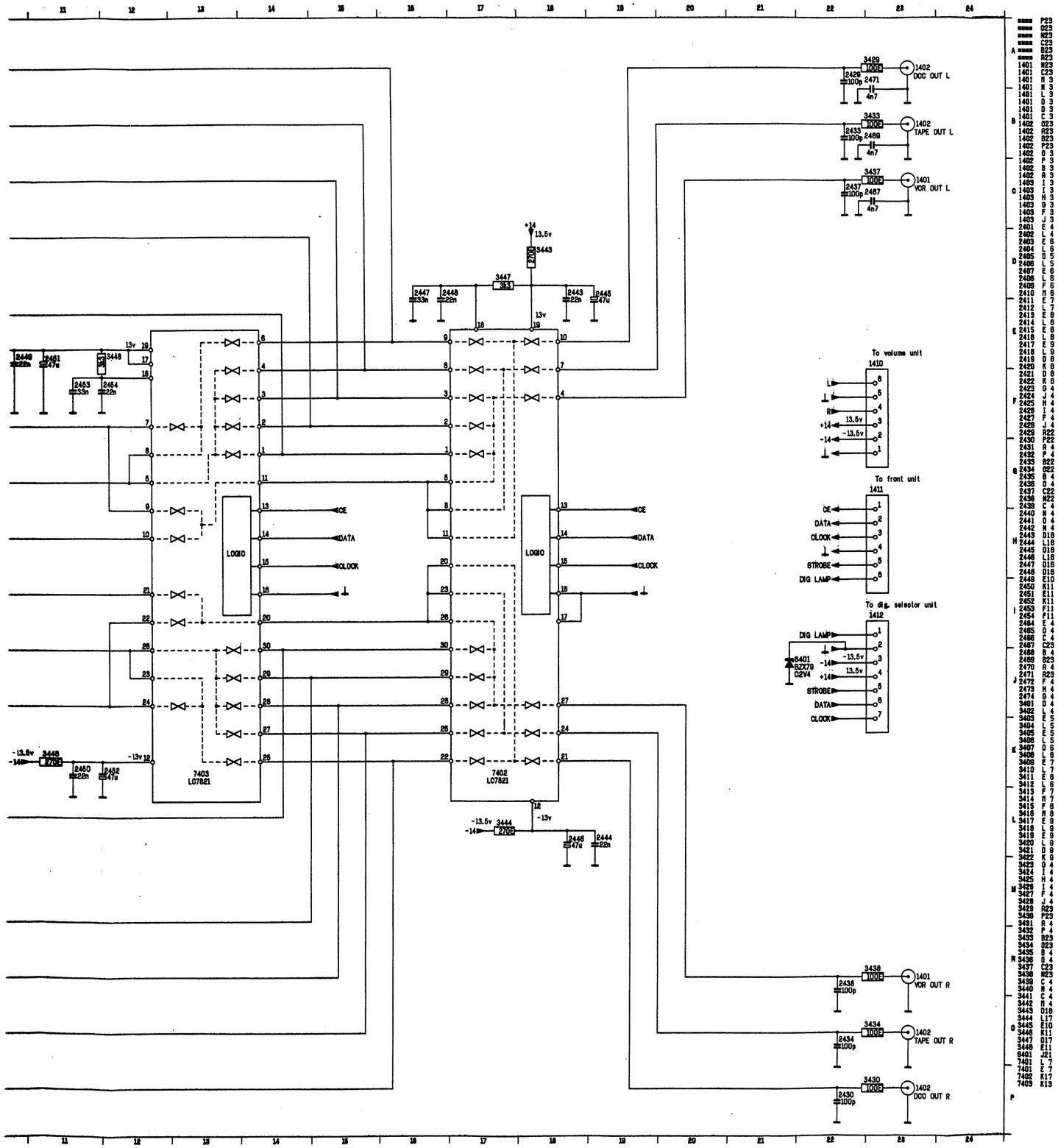
DCC IN L
TAPE IN L
TV/AUX/VCR IN L
CD IN L
PHONO IN L
TUNER IN L
PROCESS OUT L
PROCESS IN L
PROCESS IN R
PROCESS OUT R
TUNER IN R
PHONO IN R
CD IN R
TV/AUX/VCR IN R
TAPE IN R
DCC IN R

7401 NJM2068DD
7403 LC7821
7402 LC7821

DCC OUT L
TAPE OUT L
VCR OUT L

To volume unit 1410
To front unit 1411
To dig. selector unit 1412

OE
DATA
CLOCK
STROBE
DIG LAMP


+14
13.6v
3443
3447
3R3
2447 33n
2448 22n
2443 22n
2445 47u
13v
3429 100R
2429 100p
2471 4n7
1402 DCC OUT L
3433 100R
2433 100p
2469 4n7
1402 TAPE OUT L
3437 100R
2437 100p
2467 4n7
1401 VCR OUT L
2449 22n
2461 47u
3448
3R3
2463 33n
2454 22n
LOGIC
CE
DATA
CLOCK
7403 L07821
7402 L07821
-13.5v
-14
3445 270R
2460 22n
2452 47u
3444 270R
2446 47u
2444 22n
To volume unit
1410
L
R
13.6v
+14
-13.5v
-14
To front unit
1411
CE
DATA
CLOCK
STROBE
DIG LAMP
To dig. selector unit
1412
DIG LAMP
-13.5v
-14
13.6v
+14
STROBE
DATA
CLOCK
6401 BZX79 C2V4
3438 100R
2438 100p
1401 VCR OUT R
3434 100R
2434 100p
1402 TAPE OUT R
3430 100R
2430 100p
1402 DCC OUT R

FRONT UNIT

Volume unit
Volume L
Volume R
From selector unit
From front unit
LOUDNESS
on = 4.7v
off=<0,3v
VOLUME POTMETER MOTOR DRIVER
If turning
Rotary selector
wire to bottom frame
To front 1714
To selector rotary 1780
TO 1712 VU
TO 1712 VD
TO 1711 EL
TO 1711 EL m
TO 1711 STANDBY
SELECTION 910/920/930 TO R3641 MUTE
POWERDOWN
To selector unit 1702
RESET
IRQ
ROS
7850 MOS6H0060
4.4Hz
DIGITAL
DOO
TV/VCR
TUNER
PHONO
TAPE
To volume unit 1712
From power unit 1711
Balance L
Balance R
Bass
Treble
standby
Power down
ROS
EL
EL m
SPEAKER A
SPEAKER B
MUTE
MIXROUT
MUTE 20dB
L Signal clamping
R Signal clamping
Headphone
From power unit 1701
1801
St by

Rotary selector

74

SRRS 1806

+V 26v

6610 1N4002

6617 BZX79C20

6601 wire to bottom frame

3675 3669 3670 3671 3672 3673 3674 2642 560p 2644 1u 25v 6609 BZX79C20 11.8v 0.8v 11v 7811 TL081CPM 50Hz 3676 1k8 6611 1N4148 3680 3k3 2649 4u7 off=<0.3v on = 5v 6613 BZX79/C2V 3677 6612 BZX79/C6V

To front 1714

To selector rotary 1720

KNOB BO B1 +V GND +V 26v

4.7v +5 3730 3731

TO 1712 VU TO 1712 VD TO 1711 EL TO 1711 EL M TO 1711 STANDBY BELECTION 910/920/930 TO R9641 MUTE POWERDOWN 9812 9813

7860 MOS6H0D60

PD1 PD2 PD3 PA3 PB3 TCMP PD7 TCAP PA4 PA5 PD4 PD6 PA7

1702 To selector unit

OE1 DA CL GND OE2 DIG PD0 PD1 PD2 PD3 PD0

3726 2664 220n 2661 22n 7833 BC548B 3744 2667 47u 2668 560n

40 VDD VPP 1 RESET off=-4.7v on =<0.3v

IRQ ROS OSC1 OSC2 4MHz 5605 3746 PB2 PB1 PB0 PA2 PA1 PA0 PB4 PB6 PB7 PB5 PC4 PA6 PC7 PC8 PA7

RO 5 7836 BC548B 3742 3741 3740 3739 3728 7836 BC548B 7836 BC548B

IR EYE 1721 1722 2662 22n 6700 MPU6801X

3730 3731 3732 3733 3734

1808 DIRECT 1807 ESI 1806 LOUDNESS 1809 B 1810 A 1811 MUTE 1812 ROS

6632 6633 6634 1N4148

1811 1808 1809 1806 1810 1807 1812

7849 NJM3013 DOUT DIN CLK CS

SPEAKER A TO 1711

SPEAKER B TO 1711

MUTE-20dB TO IC7805

LOUDNESS TO 1712

DIRECT TO IC7805

3711 1k

3714 1k

3696 270R 6637 LTL42L2N SPEAKER A

3697 270R 6638 LTL42L2N SPEAKER B

3698 270R 6640 LTL42L2N MUTE

3699 270R 6635 LTL42L2N LOUDNESS

3700 270R 6636 LTL42L2N DIRECT

3701 270R 6641 LTL42L2N ROS

3702 270R 6639 LTL42L2N ESI

3703 270R ROS OD

6642 LTL42L2N ROS DOD

6643 LTL42L2N ROS TV/VOR

6644 LTL42L2N ROS TUNER

6645 LTL42L2N ROS PHONO

6646 LTL42L2N ROS TAPE

2669 680n 2672 4n7 2670 680n 2663 4n7 7847 P074H04094 7848 P074H04094

Bass 3661 20k 3647 4k7 3663 4k7 3667 180R 2621 120n 2623 120n 3687 150R 2625 4n7 3658 Treble 3648 1k8 3649 1k8 3655 1k8 2627 1u 2631 56p 5605 3659 100R 2629 220p 7809 4560D 2633 22u 13v 3666 4k7 2635 22n 2637 22n 13.5v +14

Bass 3651 20k 3647 4k7 3654 4k7 2622 120n 2624 120n 3668 150R 2626 4n7 3658 Treble 3648 1k8 3650 1k8 3656 1k8 3658 180R 2628 1u 2632 56p 5605 3660 100R 2630 220p 2634 22u -13.5v -14 3666 4k7 2636 22n 2638 22n -13v

3624 4k7 3630 5605 3623 4k7 3625 5605 3626 5605 3628 4k7 3752 3629 5605 3627 4k7 3753 3760 4k7 3781 4k7

L Signal clamping 6691 BZX79 C3V6 6693 BZX79 C3V6

R Signal clamping 6690 BZX79 C3V6 6692 BZX79 C3V6

Headphone From power unit 1701 L R 1801

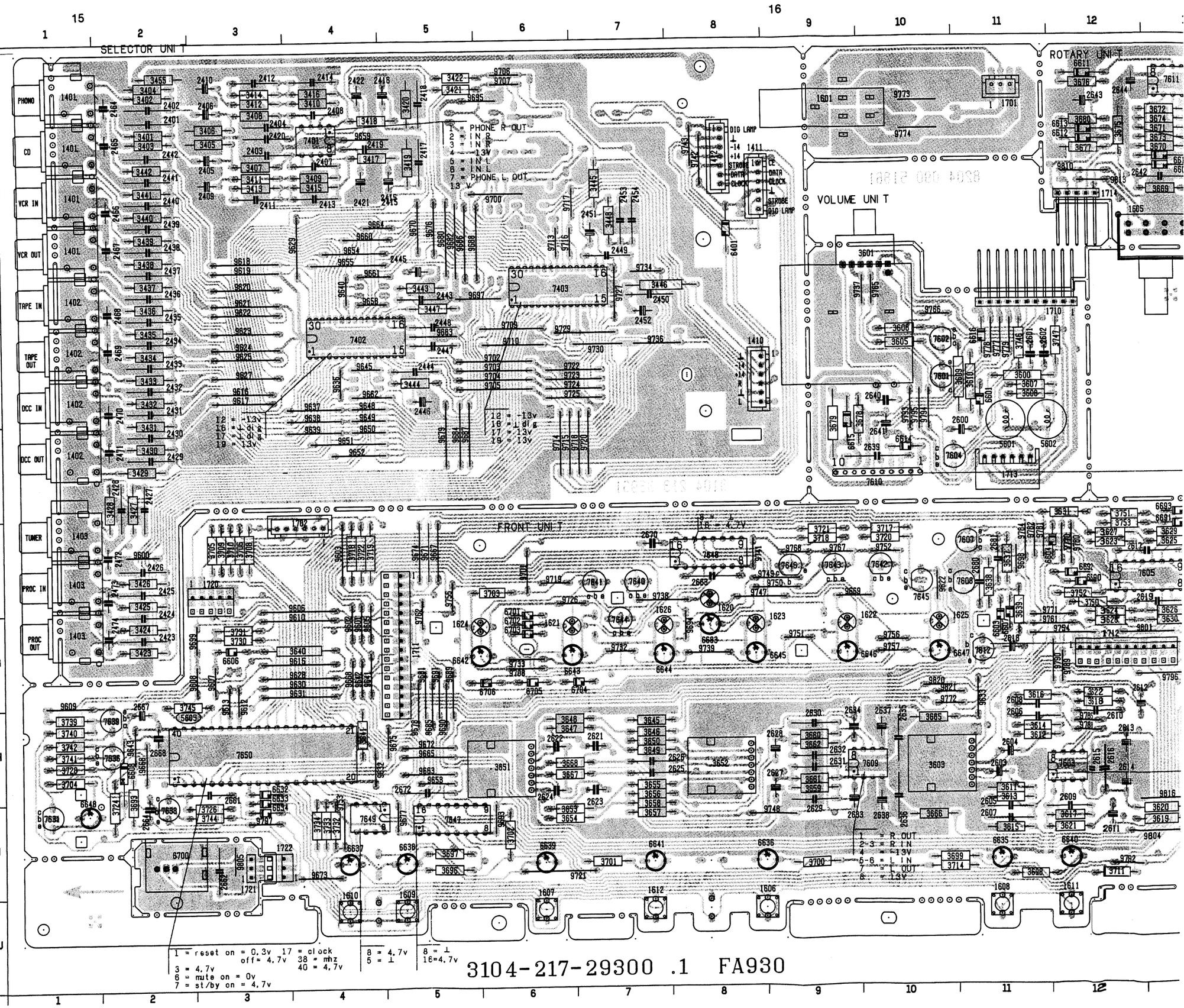
DIGITAL 1820 7840 BC548B 3722 2k2 DOD 1824 7844 BC548B TV/VOR 1821 7841 BC548B TUNER 1826 7845 BC548B PHONO 1823 7843 BC548B TAPE 1822 7842 BC548B 1825 7846 BC548B on = 4.7v 3720 2k2 3717 2k2 3718 2k2 3721 2k2 3719 2k2

3693 4k7 +5 4.7v

6704 1N4148 6705 1N4148 6706 1N4148 6701 1N4148 6702 1N4148 6703 1N4148 +14 13.5v

6608 1N4148 7831 BC548B 3724 10k 3704 St by 9648 LTL42L2N on =4.7v

GND 20



0074	C13	2601	D11	3608	D11	5601	E11	9637	D 4	9766	C10
1401	A 1	2602	D11	3609	D11	5602	E11	9638	D 4	9767	F 9
1401	B 1	2603	H11	3610	D11	5605	H 2	9639	E 4	9768	F 9
1401	B 1	2604	H11	3611	H11	6401	C 8	9640	C 4	9770	F12
1401	C 1	2605	I11	3612	H11	6601	D11	9641	G 4	9771	G11
1402	C 1	2606	H11	3613	I11	6603	G11	9642	G 4	9772	H10
1402	D 1	2607	I11	3614	H11	6604	F11	9643	H 2	9773	A10
1402	D 1	2608	H11	3615	I11	6605	H13	9645	D 4	9774	B10
1402	E 1	2609	I12	3616	G11	6606	G 3	9648	D 4	9777	D11
1403	F 1	2610	H12	3617	I12	6607	G11	9649	D 4	9778	D11
1403	F 1	2611	I12	3618	H12	6608	H 2	9650	E 4	9779	D11
1403	G 1	2612	G12	3619	I13	6609	B13	9651	E 4	9780	F12
1410	D 8	2613	H12	3620	I13	6610	B13	9652	E 4	9781	F11
1411	B 8	2614	H12	3621	I12	6611	A12	9653	H 5	9782	F11
1412	B 8	2615	H12	3622	G12	6612	B12	9654	C 4	9784	F11
1601	A 9	2616	H12	3623	F12	6613	A12	9655	C 4	9785	H12
1605	B12	2617	F12	3624	G12	6614	E10	9658	C 4	9788	H12
1606	I 8	2618	G11	3625	F13	6615	E 9	9659	B 4	9789	G12
1607	I 6	2619	F12	3626	G13	6616	D11	9660	C 4	9790	G12
1608	I11	2621	H 7	3627	F12	6632	H 3	9661	C 4	9792	I12
1609	I 5	2622	H 6	3628	G12	6633	H 3	9662	D 4	9793	D10
1610	I 4	2623	I 7	3629	F13	6634	I 3	9663	H 5	9794	D10
1611	I12	2624	I 6	3630	G13	6635	I11	9664	B 4	9795	D10
1612	I 7	2625	H 8	3631	F12	6636	I 8	9665	H 5	9796	G13
1620	G 8	2626	H 8	3632	H13	6637	I 4	9666	H 2	9797	I 3
1621	G 6	2627	H 9	3637	F11	6638	I 5	9667	F 5	9800	F13
1622	G10	2628	H 9	3638	F11	6639	I 6	9668	G 4	9801	G12
1623	G 9	2629	I 9	3639	G11	6640	I12	9669	F 9	9804	I13
1624	G 5	2630	H 9	3640	G 4	6641	I 7	9670	B 5	9805	I 3
1625	G11	2631	H 9	3641	H 4	6642	G 5	9671	F 5	9810	B12
1626	G 7	2632	H 9	3645	H 7	6643	G 6	9672	H 5	9813	B12
1701	A11	2633	I 9	3646	H 7	6644	G 7	9673	I 4	9816	I13
1702	F 4	2634	H 9	3647	H 6	6645	G 9	9674	F 5	9820	G10
1710	C12	2635	H10	3648	H 6	6646	G10	9675	H 5	9821	G10
1711	G 5	2636	I10	3649	H 7	6647	G11	9676	B 5	9822	F10
1712	G12	2637	H10	3650	H 7	6648	H 1	9677	I 5		
1713	E11	2638	I10	3651	H 6	6683	G 8	9678	H 5		
1714	B12	2639	E10	3652	H 8	6690	F12	9679	E 5		
1720	F 3	2640	D10	3653	I 6	6691	F13	9680	C 5		
1721	I 3	2641	E10	3654	I 6	6692	F12	9681	G 5		
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2402	A 2	2644	A12	3657	I 7	6701	G 6	9684	E 5		
2403	B 3	2661	H 3	3658	I 7	6702	G 6	9685	H 5		
2404	A 3	2662	I 3	3659	H 9	6703	G 6	9686	C 5		
2405	B 3	2663	F 8	3660	H 9	6704	G 7	9687	E 5		
2406	A 3	2664	I 2	3661	H 9	6705	G 6	9688	C 5		
2407	B 4	2667	G 2	3662	H 9	6706	G 6	9689	G 5		
2408	A 4	2668	H 2	3665	H10	7401	B 4	9690	H 5		
2409	B 3	2670	F 7	3666	I10	7402	D 4	9691	G 5		
2410	A 3	2672	H 5	3667	H 6	7403	C 6	9693	I 6		
2411	B 3	2680	F11	3668	H 6	7601	D10	9694	G 8		
2412	A 3	2681	F11	3669	B13	7602	D10	9695	A 6		
2413	B 4	3401	A 2	3670	B13	7603	H12	9697	C 6		
2414	A 4	3402	A 2	3671	B13	7604	E10	9698	F11		
2415	B 5	3403	B 2	3672	A13	7605	F13	9699	G 3		
2415	B 5	3404	A 2	3673	B13	7607	F11	9700	B 6		
2416	A 5	3405	B 3	3674	A13	7608	F11	9701	F 6		
2417	B 5	3406	A 3	3675	B12	7609	H10	9702	D 6		
2418	A 5	3407	B 3	3676	A12	7610	E10	9703	D 6		
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2423	G 2	3412	A 3	3693	H 2	7636	H 2	9708	G 6		
2424	G 2	3413	B 3	3696	I 5	7639	H 2	9709	D 6		
2425	F 2	3414	A 3	3697	I 5	7640	F 7	9710	D 6		
2426	F 2	3415	B 4	3698	I11	7641	F 7	9713	C 6		
2427	E 2	3416	A 4	3699	I10	7642	F10	9714	E 6		
2428	E 2	3417	B 4	3700	I 9	7643	F 9	9715	E 6		
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2448	C 5	3437	C 2	3726	I 3	9615	G 4	9738	F 7		
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2450	C 7	3439	C 2	3730	G 3	9617	D 3	9741	F 8		
2451	B 7	3440	B 2	3731	G 3	9618	C 3	9742	B 8		
2452	C 7	3441	B 2	3732	I 4	9619	C 3	9743	B 8		
2453	B 7	3442	B 2	3733	I 4	9620	C 3	9747	F 8		
2454	B 7	3443	C 5	3734	I 4	9621	C 3	9748	I 9		
2464	A 2	3444	D 5	3739	H 1	9622	C 3	9749	F 9		
2465	B 2	3445	B 7	3740	H 1	9623	D 3	9750	F 9		
2466	B 2	3446	C 7	3741	H 1	9624	D 3	9751	G 9		
2467	C 2	3447	C 5	3742	H 1	9625	D 3	9752	F10		
2468	C 2	3448	B 7	3744	I 3	9627	D 3	9753	H 4		
2469	D 2	3455	A 2	3745	H 2	9628	G 4	9754	G12		
2470	D 2	3600	D11	3746	D11	9629	C 4	9755	F 5		
2471	E 2	3601	C10	3747	D12	9630	G 4	9756	G10		
2472	F 2	3603	H10	3750	G12	9631	G 4	9757	G10		
2473	F 2	3605	D10	3751	F12	9632	H 4	9761	G11		
2474	G 2	3606	D10	3752	F12	9633	G11	9762	G 5		
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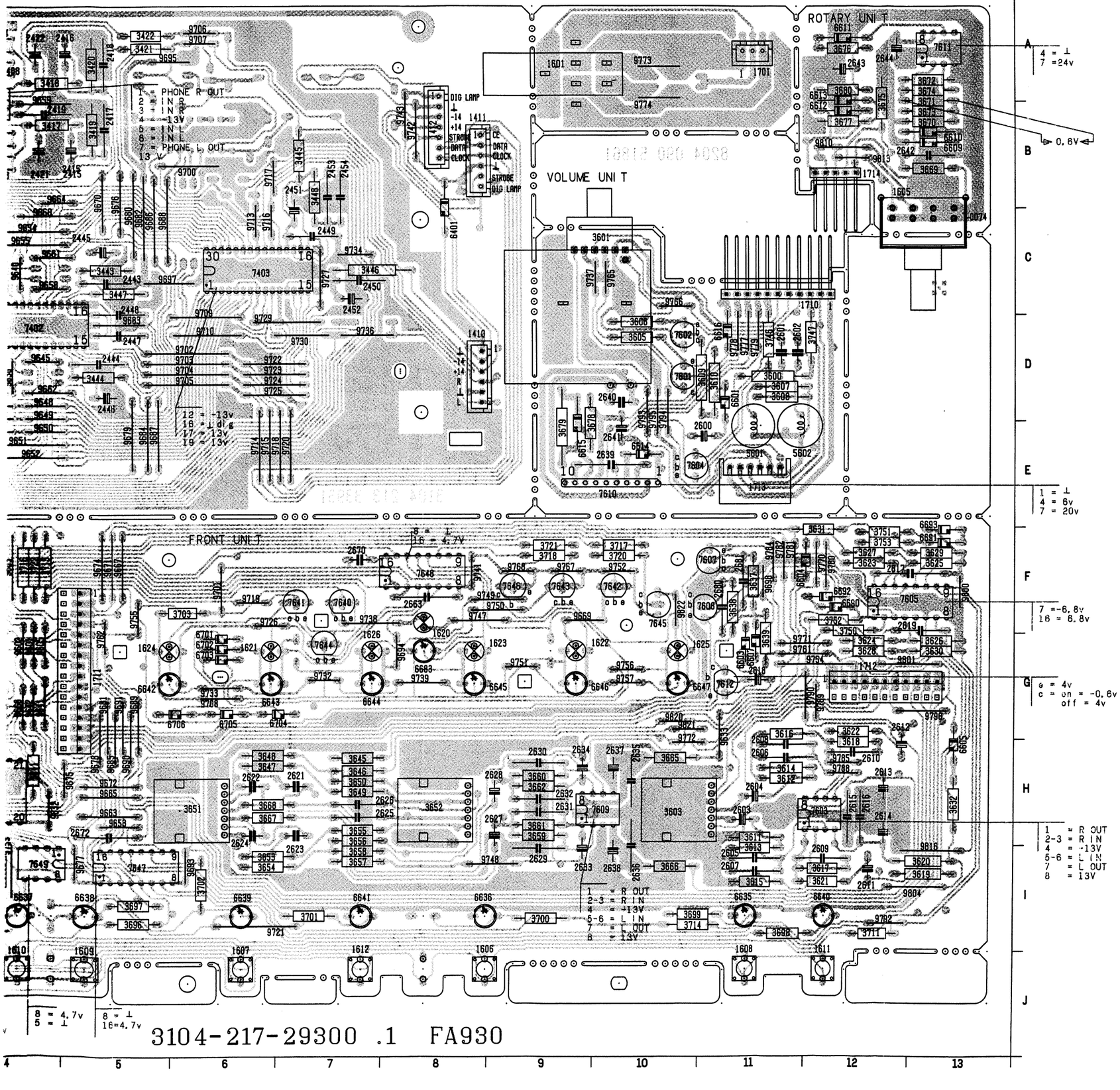

ROTARY UNIT
VOLUME UNIT
FRONT UNIT
1 = PHONE R OUT
2 = IN R
3 = -13V
4 = 13V
5 = IN L
6 = IN L
7 = PHONE L OUT
13 V
DIG LAMP
STROBE
DATA
CLOCK
0.6V
4 = ⊥
7 = 24v
1 = ⊥
4 = 6v
7 = 20v
7 = -6.8v
16 = 6.8v
g = 4v
c = on = -0.6v
off = 4v
1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V
8 = 4.7v
5 = ⊥
8 = ⊥
16=4.7v
12 = -13v
16 = ⊥ dig
17 = 13v
18 = 13v
3104-217-29300 .1 FA930

POWER UNIT

1265 to front unit

short circuit protection for dc on output

AO peak current limiter

quiescent current : adjust 3386kΩ 6mV DC-voltage (AF-input grounded)

PROTECTION CIRCUIT

RELAY 5254

RELAY B 5255

RELAY A 5256

TO HEADPHONE 1266

B LEFT

A LEFT

B RIGHT

A RIGHT

1263 SPEAKERS B

1264 SPEAKERS A

OUTPUT BOARD

1265 TO FRONT UNIT

POWER DOWN

STAND BY

SPEAKER B

SPEAKER A

DIG

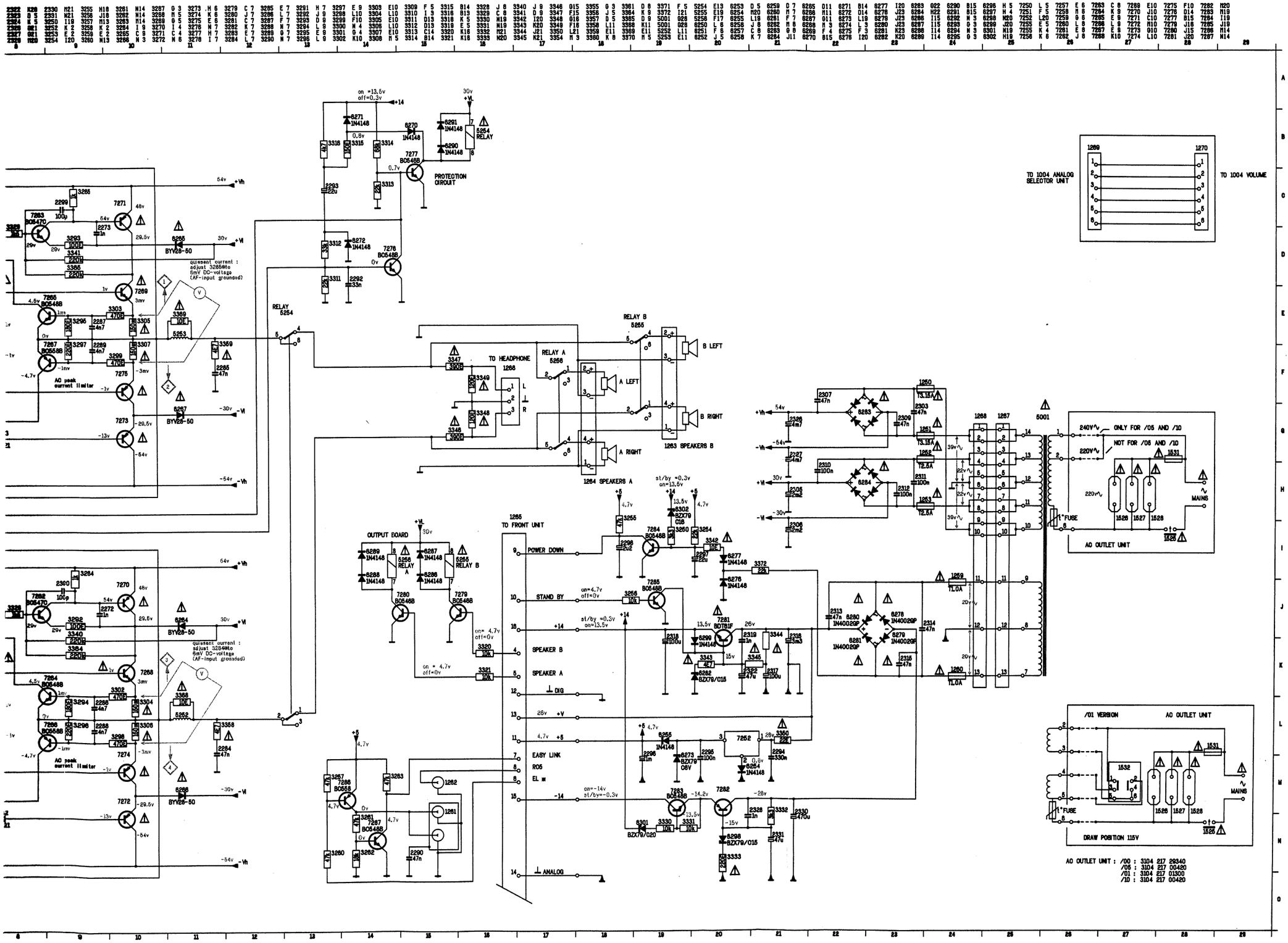
EASY LINK

R05

EL M

ANALOG

ES-UNIT MAIN/AY RED
3104-217-29270.SERV C.A.D. 91-10-09



VOOR INBRENGEN VAN SERVICE INFORMATIE ZIE PO.3104-217-25630.SERV.ES-UNIT

15a

16a

0074	C13	2601	D11	3607	D11	3753	F12	9636	D 4	9766	C10
1401	A 1	2602	D11	3608	D11	5601	E11	9637	D 4	9767	F 9
1401	B 1	2603	H11	3609	D11	5602	E12	9638	D 4	9768	F 9
1401	B 1	2604	H11	3610	D11	5605	H 2	9639	E 4	9770	F12
1401	C 1	2605	I11	3611	H11	6401	C 8	9640	C 4	9771	G12
1402	C 1	2606	H11	3612	H11	6601	D11	9641	G 4	9772	H10
1402	D 1	2607	I11	3613	I11	6603	G11	9642	G 4	9773	A10
1402	D 1	2608	H11	3614	H11	6604	F12	9643	H 2	9774	B10
1402	E 1	2609	I12	3615	I11	6605	H13	9645	D 4	9777	D11
1403	F 1	2610	H12	3616	H11	6606	G 3	9648	D 4	9778	D11
1403	F 1	2611	I12	3617	I12	6607	G11	9649	D 4	9779	D11
1403	G 1	2612	G12	3618	H12	6608	H 2	9650	E 4	9780	F12
1410	D 8	2613	H12	3619	I13	6609	B12	9651	E 4	9781	F11
1411	B 8	2614	H12	3620	I13	6610	B13	9652	E 4	9782	F11
1412	B 8	2615	H12	3621	I12	6611	A12	9653	H 5	9784	F11
1601	A 9	2616	H12	3622	G12	6612	B12	9654	C 4	9785	H12
1605	B12	2617	F12	3623	F12	6613	A12	9655	C 4	9786	H12
1606	I 9	2618	G11	3624	G12	6614	E10	9658	C 4	9789	G12
1607	J 6	2619	F13	3625	F13	6615	E 9	9659	B 4	9790	G12
1608	I11	2621	H 7	3626	G13	6616	D11	9660	C 4	9792	I12
1609	J 5	2622	H 6	3627	F12	6617	B13	9661	C 4	9793	D10
1610	J 4	2623	H 7	3628	G12	6632	H 3	9662	D 4	9794	D10
1611	I12	2624	H 6	3629	F13	6633	H 3	9663	H 5	9795	D10
1612	I 7	2625	H 8	3630	G13	6634	I 3	9664	B 4	9796	G13
1620	G 8	2626	H 8	3631	F12	6635	I11	9665	H 5	9797	I 3
1621	G 6	2627	H 9	3632	H13	6636	I 9	9666	H 2	9800	F13
1622	G10	2628	H 9	3637	F11	6637	I 4	9667	F 5	9801	G13
1623	G 9	2629	I 9	3638	F11	6638	I 5	9668	G 4	9804	I13
1624	G 5	2630	H 9	3639	G11	6639	I 6	9669	F 9	9805	I 3
1625	G11	2631	H 9	3640	G 4	6640	I12	9670	B 5	9810	B12
1626	G 7	2632	H 9	3641	H 4	6641	I 7	9671	F 5	9813	B12
1701	A11	2633	I 9	3645	H 7	6642	G 5	9672	H 5	9816	I13
1702	F 4	2634	H 9	3646	H 7	6643	G 6	9673	I 4	9820	G10
1710	C12	2635	H10	3647	H 6	6644	G 7	9674	F 5	9821	G10
1711	G 5	2638	I10	3648	H 6	6645	G 9	9675	H 5	9822	F10
1712	G12	2637	H10	3649	H 7	6646	G10	9676	B 5		
1713	E11	2638	I10	3650	H 7	6647	G11	9677	I 5		
1714	B12	2639	E10	3651	H 6	6648	H 1	9678	H 5		
1720	F 3	2640	D10	3652	H 8	6690	F12	9679	E 5		
1721	I 3	2641	E10	3653	I 6	6691	F13	9680	C 5		
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2403	B 3	2661	H 3	3657	I 7	6701	G 6	9684	E 5		
2404	A 3	2662	I 3	3658	I 7	6702	G 6	9685	H 5		
2405	B 3	2663	F 8	3659	H 9	6703	G 6	9686	C 5		
2406	A 3	2664	H 2	3660	H 9	6704	G 7	9687	E 5		
2407	B 4	2667	G 2	3661	H 9	6705	G 6	9688	C 6		
2408	A 4	2668	H 2	3662	H 9	6706	G 6	9689	G 5		
2409	B 3	2669	H 5	3665	H10	7401	B 4	9690	H 5		
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2411	B 3	2672	I 6	3667	H 6	7403	C 6	9693	I 6		
2412	A 3	2680	F11	3668	H 6	7601	D10	9694	G 8		
2413	B 4	2681	F11	3669	B13	7602	D10	9697	C 8		
2414	A 4	3401	B 2	3670	B13	7603	H12	9698	F11		
2415	B 5	3402	A 2	3671	B13	7604	E11	9699	G 3		
2415	B 5	3403	B 2	3672	A13	7605	F13	9700	B 6		
2416	A 5	3404	A 2	3673	B13	7607	F11	9701	F 8		
2417	B 5	3405	B 3	3674	A13	7608	F11	9702	D 8		
2418	A 5	3406	A 3	3675	B12	7609	H10	9703	D 6		
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2421	B 4	3409	B 4	3678	E10	7612	G11	9706	A 6		
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2454	B 7	3442	B 2	3733	I 4	9620	C 3	9748	I 9		
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2465	B 2	3444	D 5	3739	H 1	9622	C 3	9750	F 9		
2466	B 2	3445	B 7	3740	H 1	9623	D 3	9751	G 9		
2467	C 2	3446	C 7	3741	H 1	9624	D 3	9752	F10		
2468	C 2	3447	C 5	3742	H 1	9625	D 3	9753	I 4		
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2470	D 2	3455	A 2	3745	H 2	9628	G 4	9755	F 5		
2471	E 2	3600	D11	3746	D11	9629	C 4	9756	G10		
2472	F 2	3601	C10	3747	D12	9630	G 4	9757	G10		
2473	F 2	3603	H10	3750	G12	9631	G 4	9761	G12		
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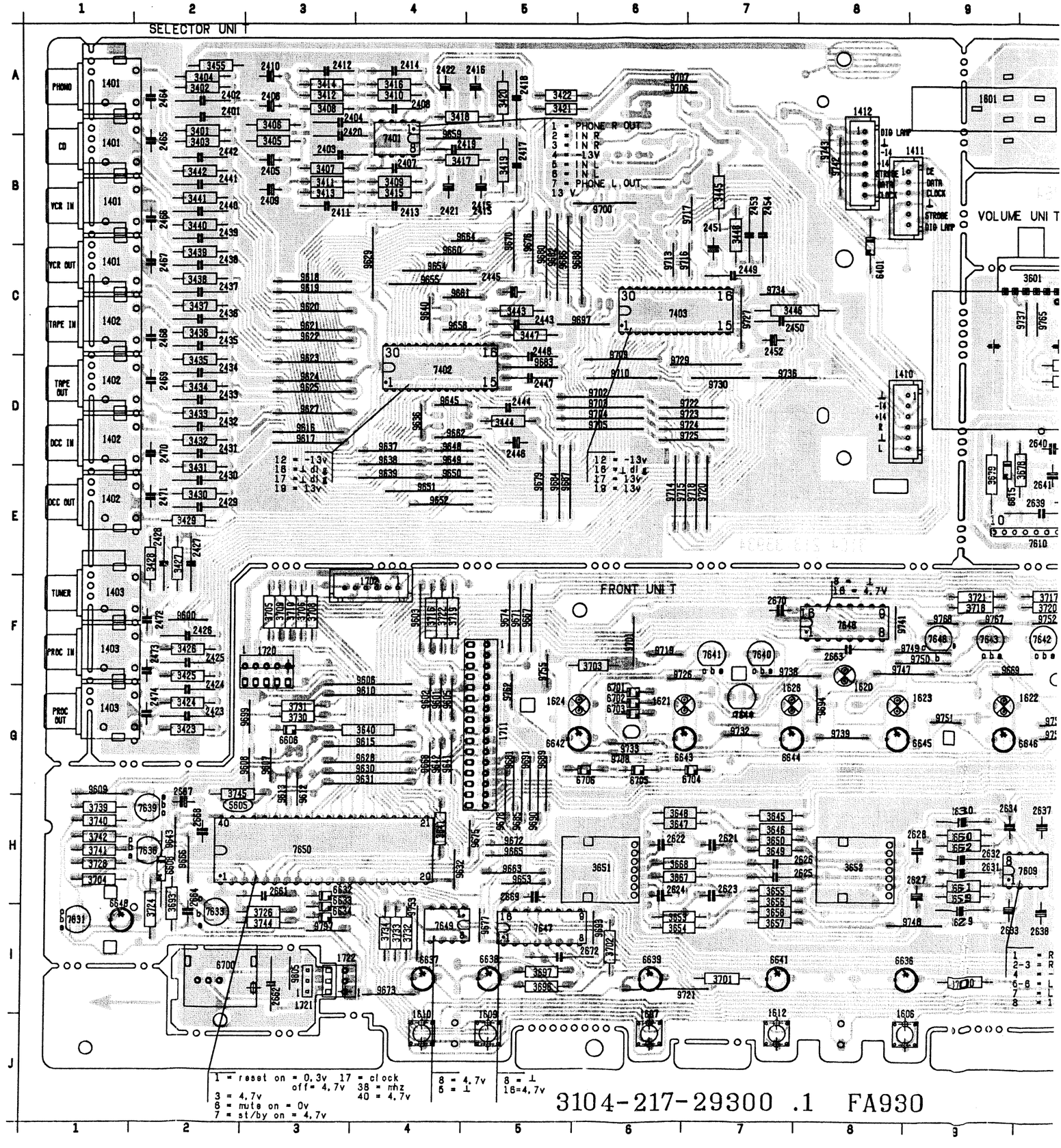
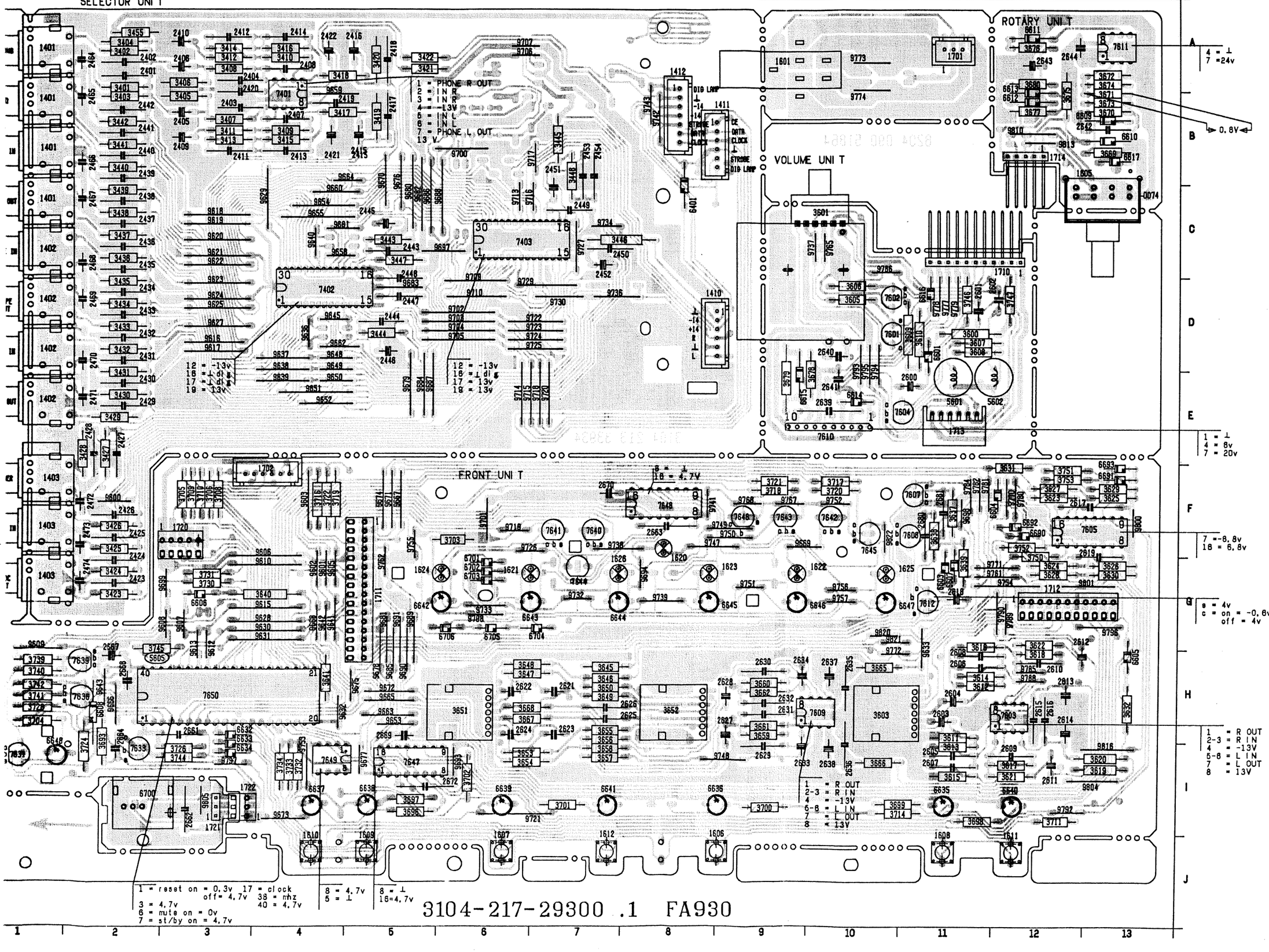
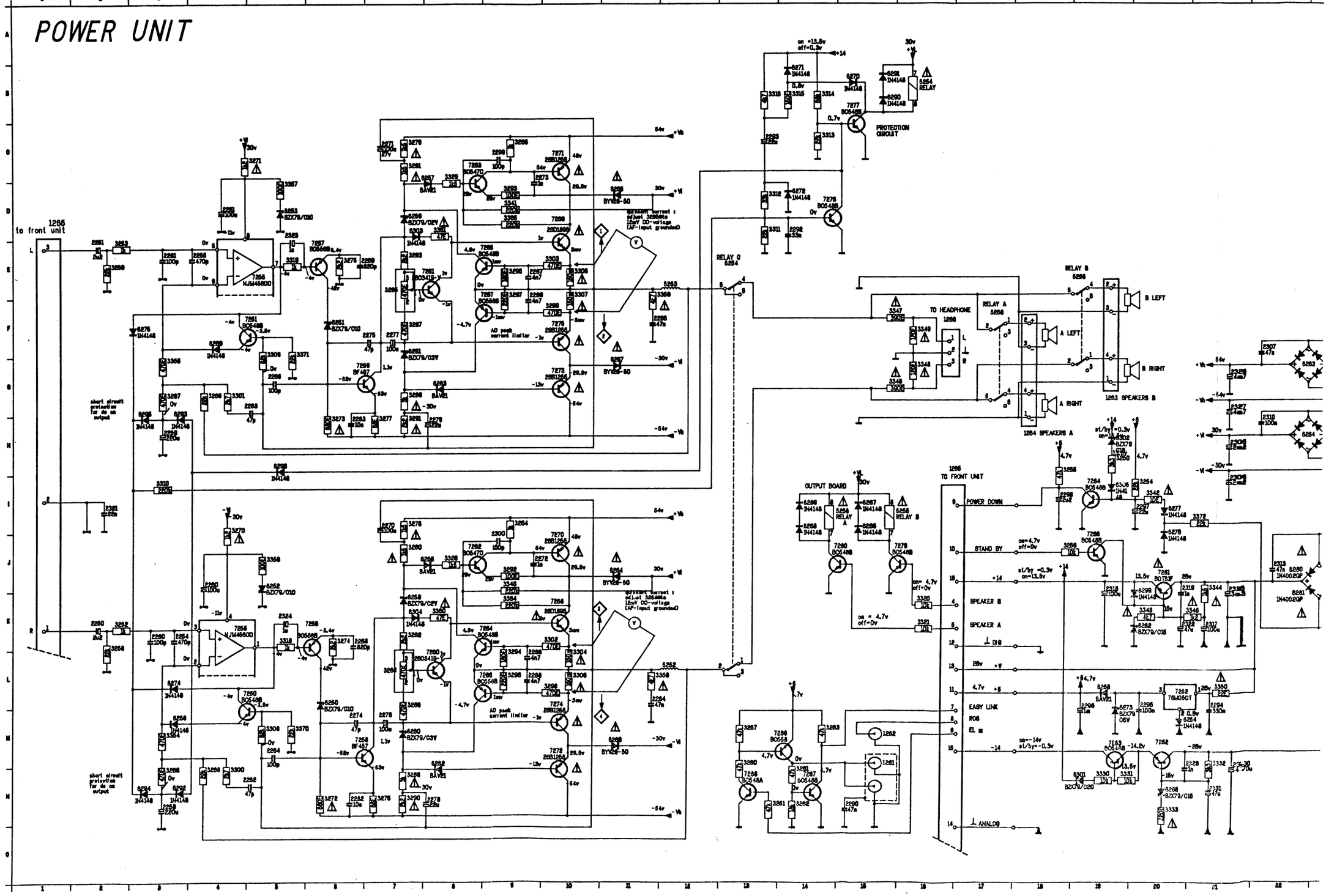
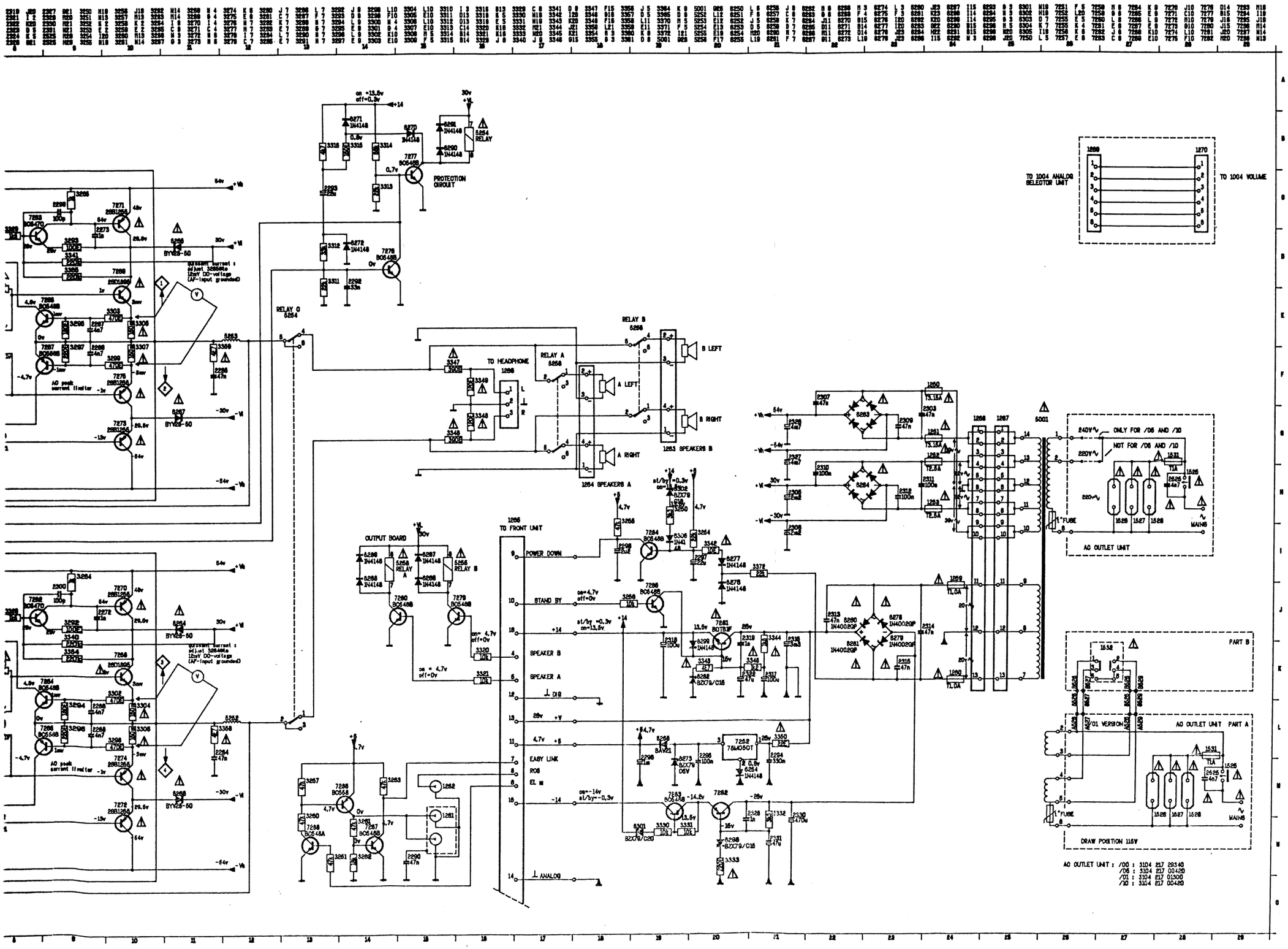
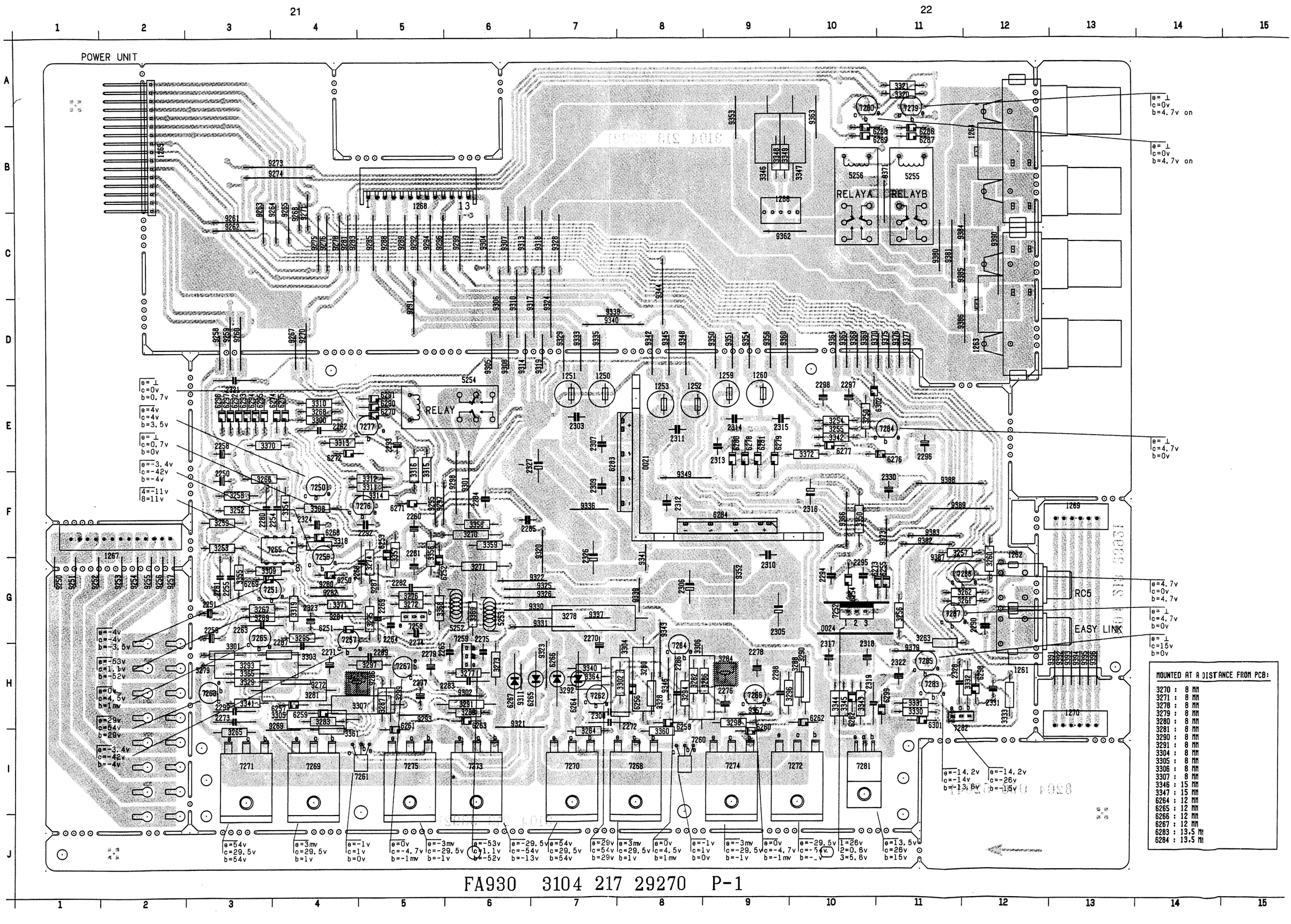



SELECTOR UNIT
ROTARY UNIT
VOLUME UNIT
FRONT UNIT
1 = PHONE R OUT
2 = IN R
3 = IN R
4 = 13V
5 = IN L
6 = IN L
7 = PHONE L OUT
13 V
DIG LAMP
STROBE
DATA
CLOCK
12 = -13v
16 = ⊥
17 = 13v
19 = 13v
0.8V
4 = ⊥
7 = 24v
1 = ⊥
4 = 8v
7 = 20v
7 = -8.8v
16 = 8.8v
8 = 4v
c = on = -0.6v
off = 4v
1 = R OUT
2-3 = R IN
4 = -13V
5-6 = L IN
7 = L OUT
8 = 13V
1 = reset on = 0.3v 17 = clock
off = 4.7v 38 = mhz
3 = 4.7v 40 = 4.7v
6 = mute on = 0v
7 = st/by on = 4.7v
8 = 4.7v
5 = ⊥
8 = ⊥
16=4.7v
3104-217-29300 .1 FA930

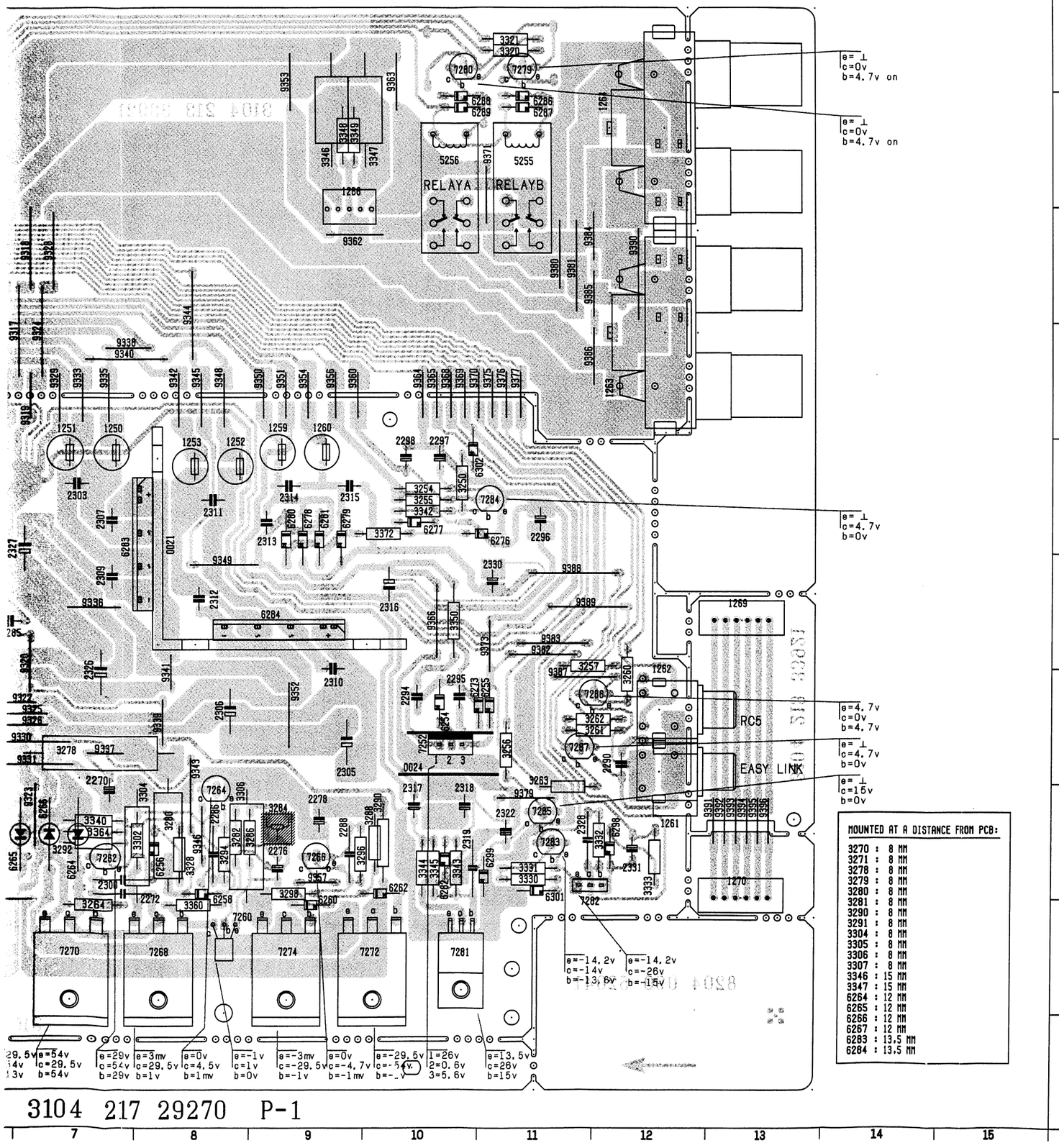
POWER UNIT


1265
to front unit
RELAY 0
5254
RELAY A
5256
RELAY B
5256
TO HEADPHONE
1266
B LEFT
A LEFT
B RIGHT
A RIGHT
1263 SPEAKERS B
1264 SPEAKERS A
PROTECTION CIRCUIT
OUTPUT BOARD
1265
TO FRONT UNIT
POWER DOWN
STAND BY
SPEAKER B
SPEAKER A
EASY LINK
ROS
EL m
ANALOG
TO FRONT UNIT
short circuit protection for dc on output
AO peak current limiter
BYV28-50
BAV21
BZC7B/C10
BZC7B/C15
BZC7B/C20
BZC7B/C6V
BZC7B/C8V
BZC7B/C10
BZC7B/C3V
BZC7B/C6V
BZC7B/C15
78L05CT
NJM4560D


TO 1004 ANALOG SELECTOR UNIT
TO 1004 VOLUME
PROTECTION CIRCUIT
RELAY A
RELAY B
RELAY C
TO HEADPHONE
B LEFT
B RIGHT
A LEFT
A RIGHT
SPEAKERS B
SPEAKERS A
OUTPUT BOARD
TO FRONT UNIT
POWER DOWN
STAND BY
SPEAKER B
SPEAKER A
EASY LINK
ROS
ANALOG
ONLY FOR /06 AND /10
NOT FOR /06 AND /10
AO OUTLET UNIT
PART B
AO OUTLET UNIT PART A
/01 VERSION
DRAW POSITION 115V
AO OUTLET UNIT : /00 : 3104 217 29340
/06 : 3104 217 00420
/01 : 3104 217 01500
/10 : 3104 217 00420



FA930 3104 217 29270 P-1



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	0024	G10	3274	G 5	6274	E 4	9301	F 6
	1250	D 7	3275	G 5	6275	E 4	9302	H 6
	1251	D 7	3276	G 5	6276	E11	9304	C 6
A	1252	E 8	3277	H 6	6277	E10	9305	D 6
	1253	E 8	3278	G 7	6278	E 9	9306	D 6
	1259	D 9	3279	H 3	6279	E 9	9307	C 6
	1260	D 9	3280	H 8	6280	E 9	9308	D 6
	1261	H12	3281	H 4	6281	E 9	9310	D 6
	1262	G12	3282	H 8	6282	H10	9311	H 6
	1263	D12	3283	H 4	6283	E 7	9313	C 6
	1264	B12	3284	H 9	6284	F 9	9314	D 6
	1265	B 2	3285	H 4	6286	B11	9317	D 7
	1266	B 9	3286	H 9	6287	B11	9318	C 7
	1267	G 2	3287	H 5	6288	B11	9319	D 7
B	1268	B 5	3288	H10	6289	B11	9320	F 7
	1269	F13	3289	H 6	6290	E 5	9321	H 6
	1270	H13	3290	H10	6291	E 5	9322	G 7
	2250	F 3	3291	H 6	6292	E 3	9323	H 7
	2251	G 3	3292	H 7	6293	E 3	9324	D 7
	2254	F 4	3293	H 3	6294	E 3	9325	G 7
	2255	G 3	3294	H 8	6295	E 3	9326	G 7
	2258	E 3	3295	G 4	6296	E 3	9328	C 7
	2259	G 3	3296	H10	6297	E 3	9329	D 7
	2260	F 5	3297	H 5	6298	H12	9330	G 7
	2261	G 5	3298	H 9	6299	H11	9331	G 7
C	2262	E 4	3299	H 5	6301	I11	9333	D 7
	2263	G 3	3300	E 4	6302	E11	9335	D 7
	2264	H 5	3301	H 3	7250	F 4	9336	F 7
	2265	H 5	3302	H 8	7251	G 3	9337	G 7
	2268	G 4	3303	H 4	7252	G10	9338	D 7
	2269	G 5	3304	H 8	7255	F 4	9339	G 8
	2270	G 7	3305	H 4	7256	G 4	9340	D 7
	2271	H 4	3306	H 8	7257	H 4	9341	G 8
	2272	I 8	3307	H 5	7258	G 5	9342	D 8
	2273	H 3	3308	F 4	7259	G 6	9343	G 8
	2274	H 5	3309	G 3	7260	I 8	9344	C 8
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	2276	H 9	3311	F 5	7262	H 7	9346	H 8
	2277	H 5	3312	F 5	7263	H 3	9348	D 8
	2278	H 9	3313	E 4	7264	H 8	9349	F 8
	2279	H 5	3314	F 5	7265	G 3	9350	D 9
	2280	F 3	3315	E 5	7266	H 9	9351	D 9
	2281	G 3	3316	E 5	7267	H 5	9352	G 9
	2282	G 5	3318	F 4	7268	I 8	9353	A 9
	2283	H 6	3319	G 4	7269	I 4	9354	D 9
	2284	F 6	3320	A11	7270	I 7	9356	D 9
	2285	F 6	3321	A11	7271	I 3	9357	H 9
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	2287	H 4	3329	H 3	7273	I 6	9362	C 9
	2288	H 9	3330	H11	7274	I 9	9363	A10
	2289	H 5	3331	H11	7275	I 5	9364	D10
	2290	G12	3332	H12	7276	F 5	9365	D10
	2292	F 5	3333	H12	7277	E 5	9366	F10
	2293	E 5	3340	H 7	7279	A11	9368	D10
	2294	G10	3341	H 3	7280	A10	9369	D10
	2295	G10	3342	E10	7281	I10	9370	D10
	2296	E11	3343	H10	7282	I11	9371	B11
	2297	E10	3344	H10	7283	H11	9373	F11
F	2298	E10	3345	H10	7284	E11	9375	D11
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	2300	H 7	3347	B10	7286	G12	9377	D11
	2303	E 7	3348	B 9	7287	G11	9379	H11
	2305	G 9	3349	B 9	7250	G 1	9380	C11
	2306	G 8	3350	F10	9251	G 1	9381	C11
	2307	E 7	3354	F 4	9252	G 1	9382	F11
	2309	F 7	3355	G 3	9253	G 2	9383	F11
	2310	G 9	3356	F 5	9254	G 2	9384	C11
	2311	E 8	3357	F 5	9255	G 2	9385	C11
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	2314	E 9	3360	I 8	9258	D 3	9388	F11
	2315	E 9	3361	I 4	9259	D 3	9389	F11
	2316	F10	3364	H 7	9260	D 3	9390	C12
	2317	H10	3365	H 3	9261	C 3	9391	H13
	2318	H10	3368	G 5	9262	C 3	9392	H13
	2319	H10	3369	G 6	9263	B 3	9393	H13
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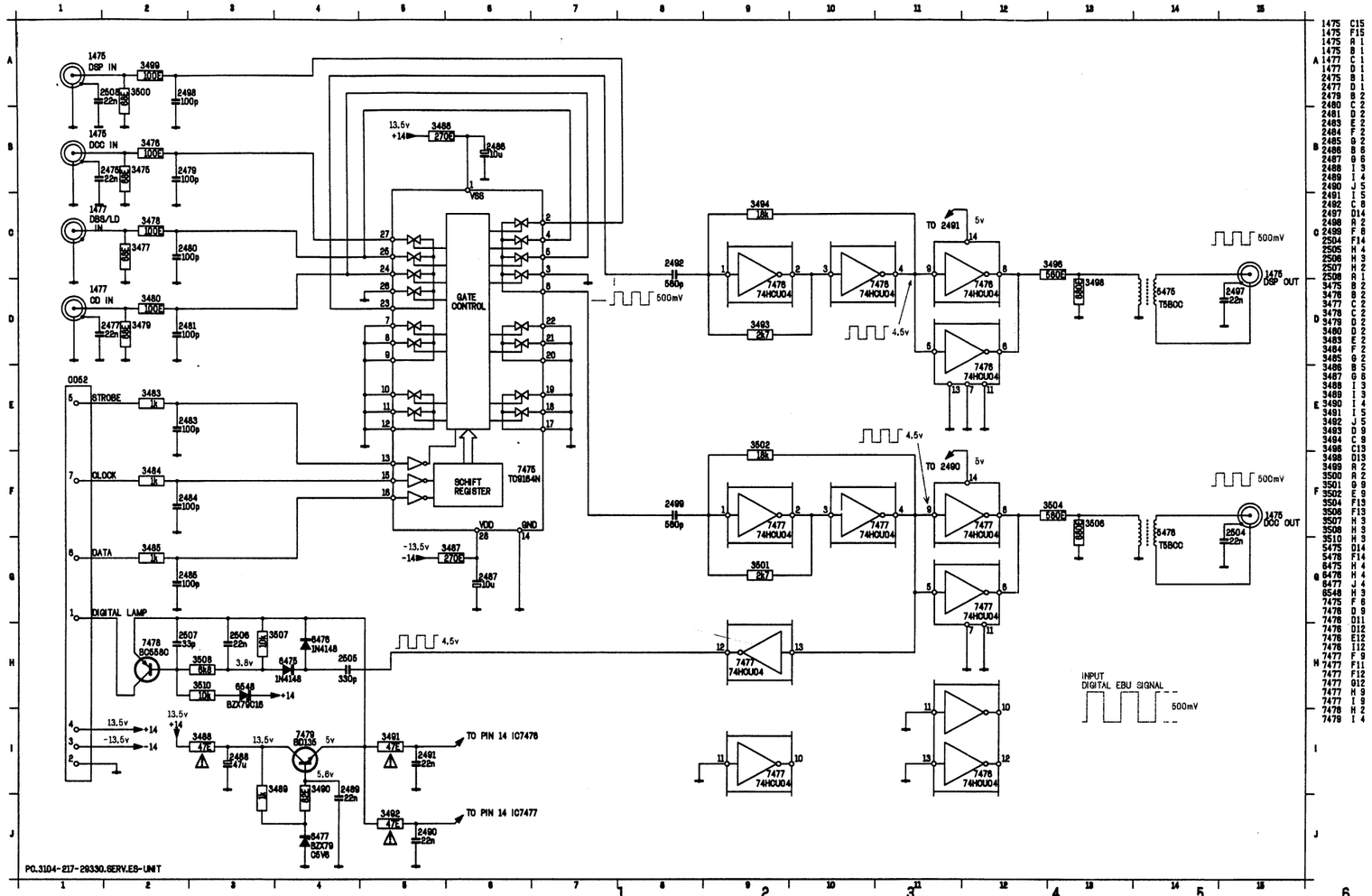

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1475 B 1
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2483 E 2
2484 F 2
2485 G 2
B 2486 B 6
2487 G 6
2488 I 3
2489 I 4
2490 J 5
2491 I 5
2492 C 6
2497 D14
2498 A 2
G 2499 F 6
2504 F14
2505 H 4
2506 H 3
2507 H 2
2508 A 1
3475 B 2
3476 B 2
3477 C 2
3478 C 2
D 3479 D 2
3480 D 2
3483 E 2
3484 F 2
3485 G 2
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3487 G 6
3488 I 3
3489 I 3
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3491 I 5
3492 J 5
3493 D 9
3494 C 9
3496 C13
3498 D13
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F 3501 G 9
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3507 H 3
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G 6476 H 4
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7475 F 6
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7476 E12
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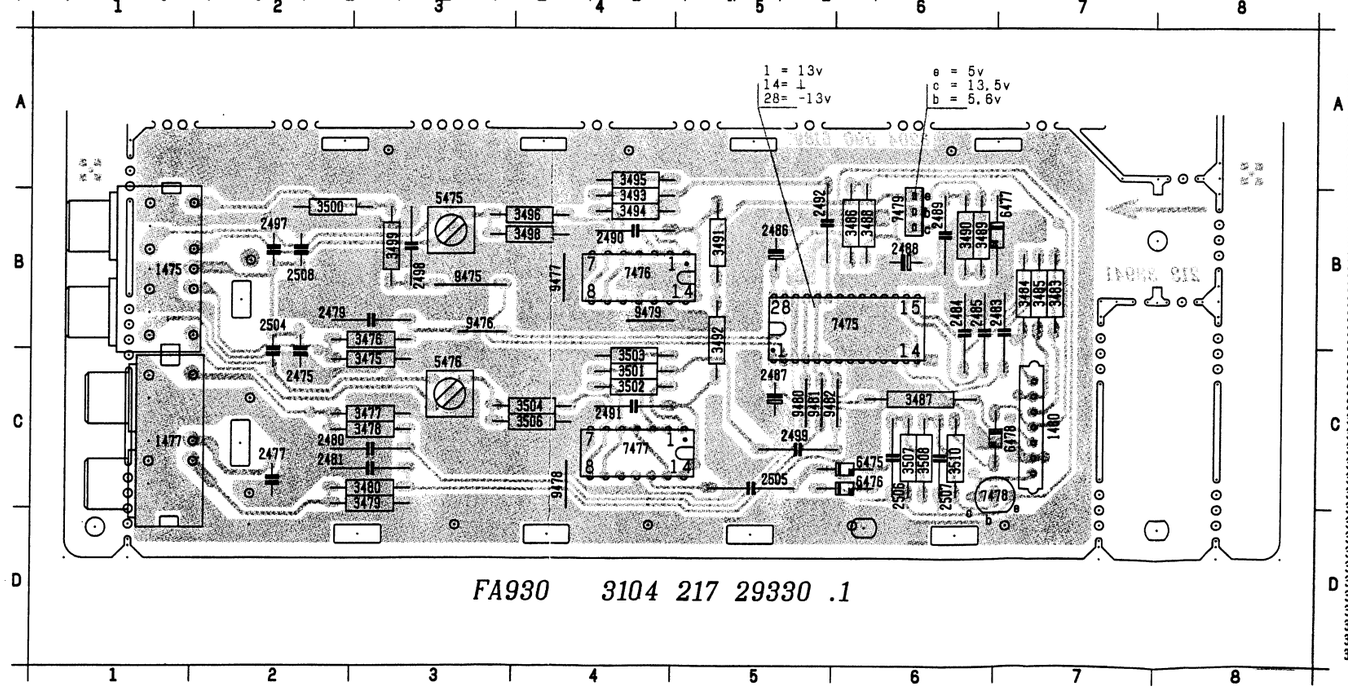
ES-UNIT OVERLAY PCB
3104-217-29330.SERV C.A.D. 91-10-09



FA930 3104 217 29330 .1

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3479 D 3 9480 C 5
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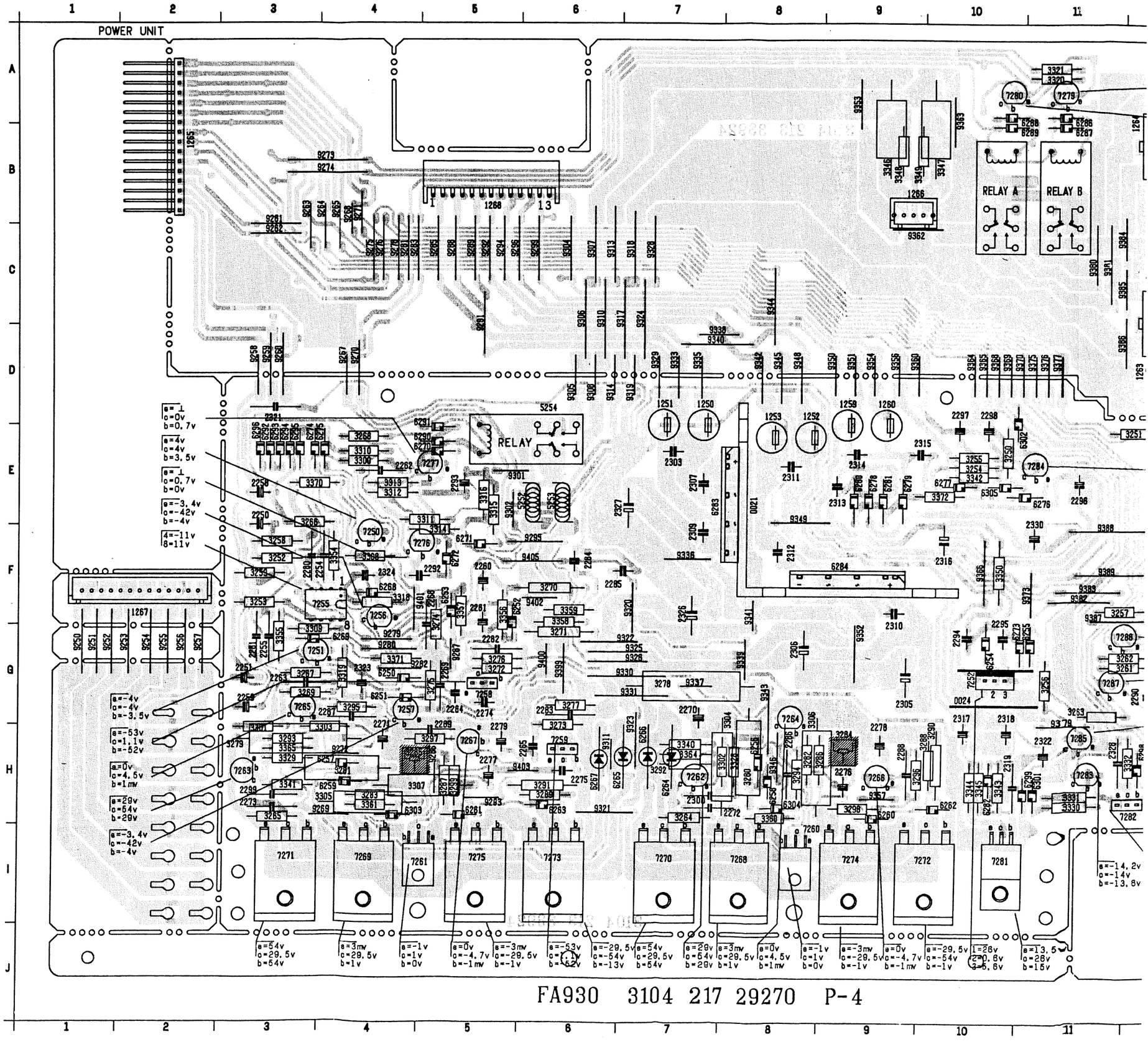
3483 B 7 9482 C 6
3484 B 7
3485 B 7
3486 B 6
3487 C 6
C 3488 B 6
3489 B 6
3490 B 6
3491 B 5
3492 B 5
3493 B 4

MECHANICAL PARTS

401	4822 410 61699	KNOB SOURCE SEL.ASSY
402	4822 532 21449	RUBBER RING
403	4822 426 51524	FRONT ASSY
404	4822 413 41696	KNOB ASSY
405	4822 450 61831	IR-WINDOW
406	4822 413 51399	VOLUME KNOB ASSY
407	4822 426 60621	STRIP
408	4822 454 12791	PLATE ORNAMENTAL
409	4822 410 61698	BUTTON ASSY
410	4822 380 20425	LED REFLECTOR
412	4822 255 41247	LEDHOLDER
413	4822 450 61832	WINDOW
414	4822 466 70734	DIFFUSOR
415	4822 130 91065	DIG.REFLECTOR
416	4822 466 70733	LICHTSCREEN
417	4822 267 31453	HEADPHONE
418	4822 380 20424	REFLECTOR
419	4822 273 10237	ROTARY SWITCH
421	4822 404 21194	BRACKET
422	4822 462 71808	POWER CAP
425	4822 130 81254	IR EYE
426	4822 276 13224	POWER SWITCH
427	4822 146 31043	TRAFO
428	4822 462 41888	FOOT
429	4822 462 41887	FOOT VILT
431	4822 101 21175	VOLUME ASSY
432	4822 532 60948	BUSHING
433	4822 265 20544	MAINS OUTPUT
433	4822 265 20554	MAINS OUTPUT ONLY /05
434	4822 321 61478	CINCH CORD
435	4822 321 10789	MAINS CORD
436	4822 268 90449	JUMPER PLUG
437	4822 404 21195	TRANSISTOR BRACKET
438	4822 502 13921	PHONE GND SREW
	4822 218 10439	REMOTE CONTROL (RH6640/01)

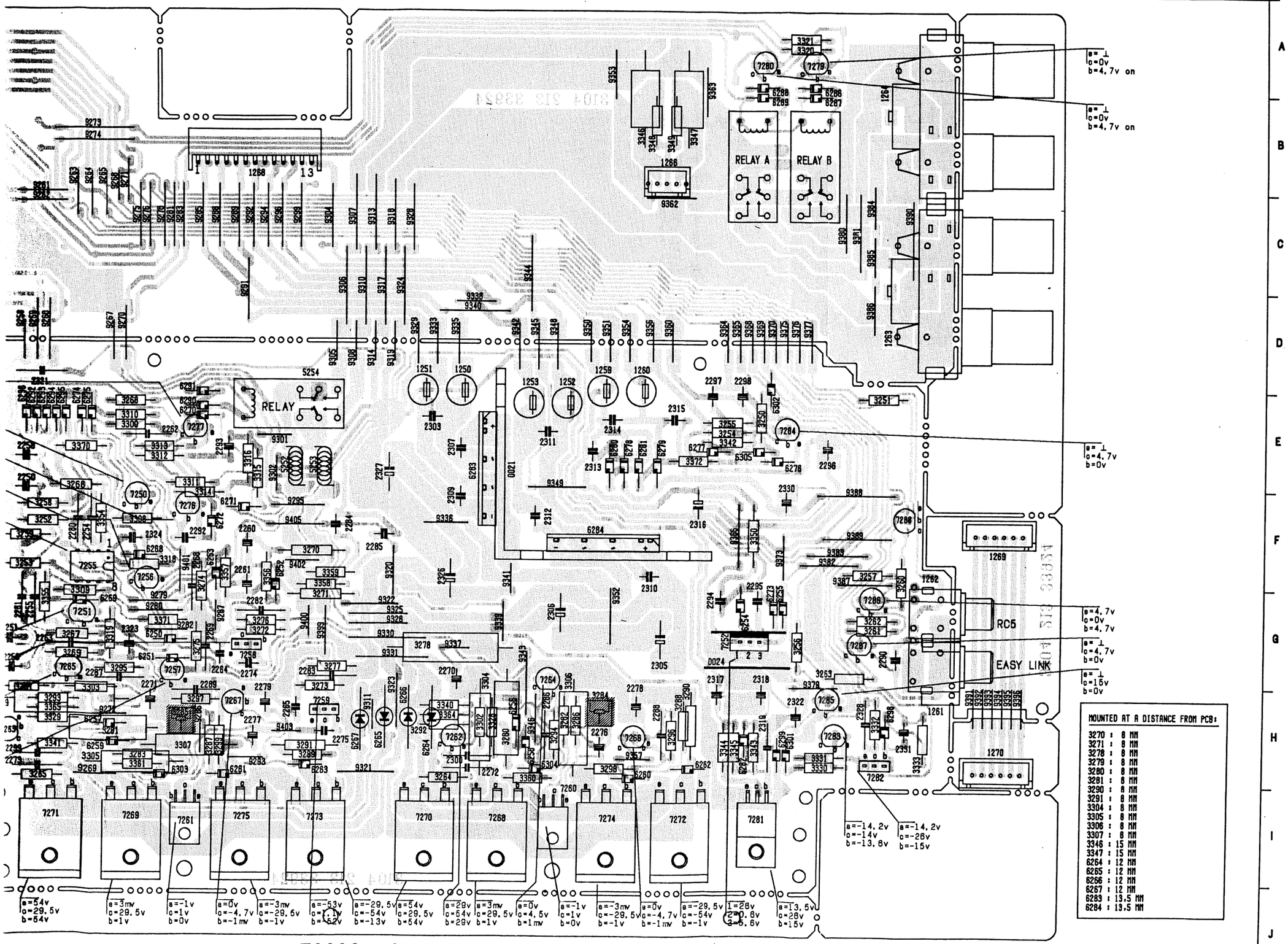
0021	E 8	3272	G 5	6274	E 3	9299	C 6								
0024	G10	3273	H 6	6275	E 4	9301	E 5								
1250	D 7	3274	F 5	6276	E11	9302	E 5								
1251	D 7	3275	G 5	6277	E10	9304	C 6								
1252	D 8	3276	G 5	6278	E 9	9305	D 6								
1253	D 8	3277	G 6	6279	E 9	9306	C 6								
1259	D 9	3278	G 7	6280	E 9	9307	C 6								
1260	D 9	3279	H 3	6281	E 9	9308	D 6								
1261	H12	3280	H 8	6282	H10	9310	C 6								
1262	F12	3281	H 4	6283	E 7	9311	H 6								
1263	D12	3282	H 8	6284	F 9	9313	C 6								
1264	A12	3283	H 4	6286	B11	9314	D 6								
1265	B 2	3284	H 9	6287	B11	9317	C 6								
1266	B 9	3285	H 4	6288	B11	9318	C 7								
1267	F 2	3286	H 9	6289	B11	9319	D 7								
1268	B 5	3287	H 5	6290	E 5	9320	F 7								
1269	F13	3288	H10	6291	E 5	9321	H 6								
1270	H13	3289	H 6	6292	E 3	9322	G 7								
2250	E 3	3290	H10	6293	E 3	9323	G 7								
2251	G 3	3291	H 6	6294	E 3	9324	C 7								
2254	F 4	3292	H 7	6295	E 3	9325	G 7								
2255	G 3	3293	H 3	6296	E 3	9326	G 7								
2258	E 3	3294	H 8	6298	H12	9328	C 7								
2259	G 3	3295	G 4	6299	H11	9329	D 7								
2260	F 5	3296	H10	6301	H11	9330	G 7								
2261	F 5	3297	H 5	6302	E11	9331	G 7								
2262	E 4	3298	H 9	6303	H 4	9333	D 7								
2263	G 3	3299	H 5	6304	H 8	9335	D 7								
2264	G 5	3300	E 4	6305	E10	9336	F 7								
2265	H 6	3301	H 3	7250	F 4	9337	G 7								
2268	F 5	3302	H 8	7251	G 3	9338	D 7								
2269	G 5	3303	H 4	7252	G10	9339	G 8								
2270	G 7	3304	G 8	7255	F 4	9340	D 7								
2271	H 4	3305	H 4	7256	F 4	9341	F 8								
2272	H 8	3306	G 8	7257	G 4	9342	D 8								
2273	H 3	3307	H 4	7258	G 5	9343	G 8								
2274	G 5	3308	F 4	7259	H 6	9344	C 8								
2275	H 6	3309	G 3	7260	I 8	9345	D 8								
2276	H 9	3310	E 4	7261	I 5	9346	H 8								
2277	H 5	3311	E 5	7262	H 7	9348	D 8								
2278	H 9	3312	E 4	7263	H 3	9349	E 8								
2279	H 5	3313	E 4	7264	G 8	9350	D 9								
2280	F 3	3314	F 5	7265	G 3	9351	D 9								
2281	G 3	3315	E 5	7266	H 9	9352	G 9								
2282	G 5	3316	E 5	7267	H 5	9353	A 9								
2283	G 6	3318	F 4	7268	I 8	9354	D 9								
2284	F 6	3319	G 4	7269	I 4	9356	D 9								
2285	F 6	3320	A11	7270	I 7	9357	H 9								
2286	H 8	3321	A11	7271	I 3	9360	D 9								
2287	G 4	3328	H 8	7272	I10	9362	C 9								
2288	H 9	3329	H 3	7273	I 6	9363	A10								
2289	H 5	3330	H11	7274	I 9	9364	D10								
2290	G12	3331	H11	7275	I 5	9365	D10								
2292	F 5	3332	H12	7276	F 5	9366	F10								
2293	E 5	3333	H12	7277	E 5	9368	D10								
2294	G10	3340	H 7	7279	A11	9369	D10								
2295	G10	3341	H 3	7280	A10	9370	D10								
2296	E11	3342	E10	7281	I10	9371	B11								
2297	D10	3343	H10	7282	H12	9373	F11								
2298	D10	3344	H10	7283	H11	9375	D11								
2299	H 3	3345	H10	7284	E11	9376	D11								
2300	H 7	3346	B 9	7285	H11	9377	D11								
2303	E 7	3347	B10	7286	G12	9379	G11								
2305	G 9	3348	B 9	7287	G11	9380	C11								
2308	G 8	3349	B 9	7288	E12	9381	C11								
2307	E 7	3350	F10	9250	G 1	9382	F11								
2309	F 7	3354	F 4	9251	G 1	9383	F11								
2310	G 9	3355	G 3	9252	G 1	9384	C11								
2311	E 8	3356	F 5	9253	G 2	9385	C11								
2312	F 8	3357	F 5	9254	G 2	9386	D11								
2313	E 9	3358	G 6	9255	G 2	9387	F11								
2314	E 9	3359	F 6	9256	G 2	9388	F11								
2315	E 9	3360	H 8	9257	G 2	9389	F11								
2316	F10	3361	H 4	9258	D 3	9390	C12								
2317	G10	3364	H 7	9259	D 3	9391	H13								
2318	G10	3365	H 3	9260	D 3	9392	H13								
2319	H10	3370	E 3	9261	B 3	9393	H13								
2321	D 3	3371	G 4	9262	C 3	9394	H13								
2322	H11	3372	E10	9263	B 3	9395	H13								
2323	G 4	5252	E 6	9264	B 4	9396	H13								
2324	F 4	5253	E 6	9265	B 4	9399	G 6								
2326	F 7	5254	D 6	9267	D 4	9400	G 6								
2327	E 6	5255	B11	9268	B 4	9401	F 5								
2328	H11	5256	B10	9269	H 4	9402	F 6								
2330	E11	6250	G 4	9270	D 4	9403	H 6								
2331	H12	6251	G 4	9271	B 4	9405	F 8								
3250	E10	6252	F 5	9272	H 4										
3251	E12	6253	F 5	9273	B 4										
3252	F 3	6254	G10	9274	B 4										
3253	F 3	6255	G11	9275	C 4										
3254	E10	6256	H 8	9276	C 4										
3255	E10	6257	H 4	9278	C 4										
3256	G11	6258	H 8	9279	G 4										
3257	F11	6259	H 4	9280	G 4										
3258	F 3	6260	H 9	9281	C 4										
3259	F 3	6261	H 5	9282	G 5										
3260	F12	6262	H10	9283	C 4										
3261	G12	6263	H 6	9285	C 5										
3262	G12	6264	H 7	9286	H 5										
3263	G11	6265	H 6	9287	G 5										
3264	H 7	6266	H 7	9288	C 5										
3265	H 3	6267	H 6	9289	C 5										
3266	F 3	6268	F 4	9291	C 5										
3267	G 3	6269	G 4	9292	C 5										
3268	E 4	6270	F 5	9293	H 5										
3269	G 3	6271	F 5	9294	C 5										
3270	F 6	6272	F 5	9295	F 6										
3271	G 6	6273	G10	9296	C 5										



FA930 3104 217 29270 P-4

22a

23a



MOUNTED AT A DISTANCE FROM PCB:

3270	8 MM
3271	8 MM
3278	8 MM
3279	8 MM
3280	8 MM
3281	8 MM
3290	8 MM
3291	8 MM
3304	8 MM
3305	8 MM
3306	8 MM
3307	8 MM
3346	15 MM
3347	15 MM
6264	12 MM
6265	12 MM
6266	12 MM
6267	12 MM
6283	13,5 MM
6284	13,5 MM

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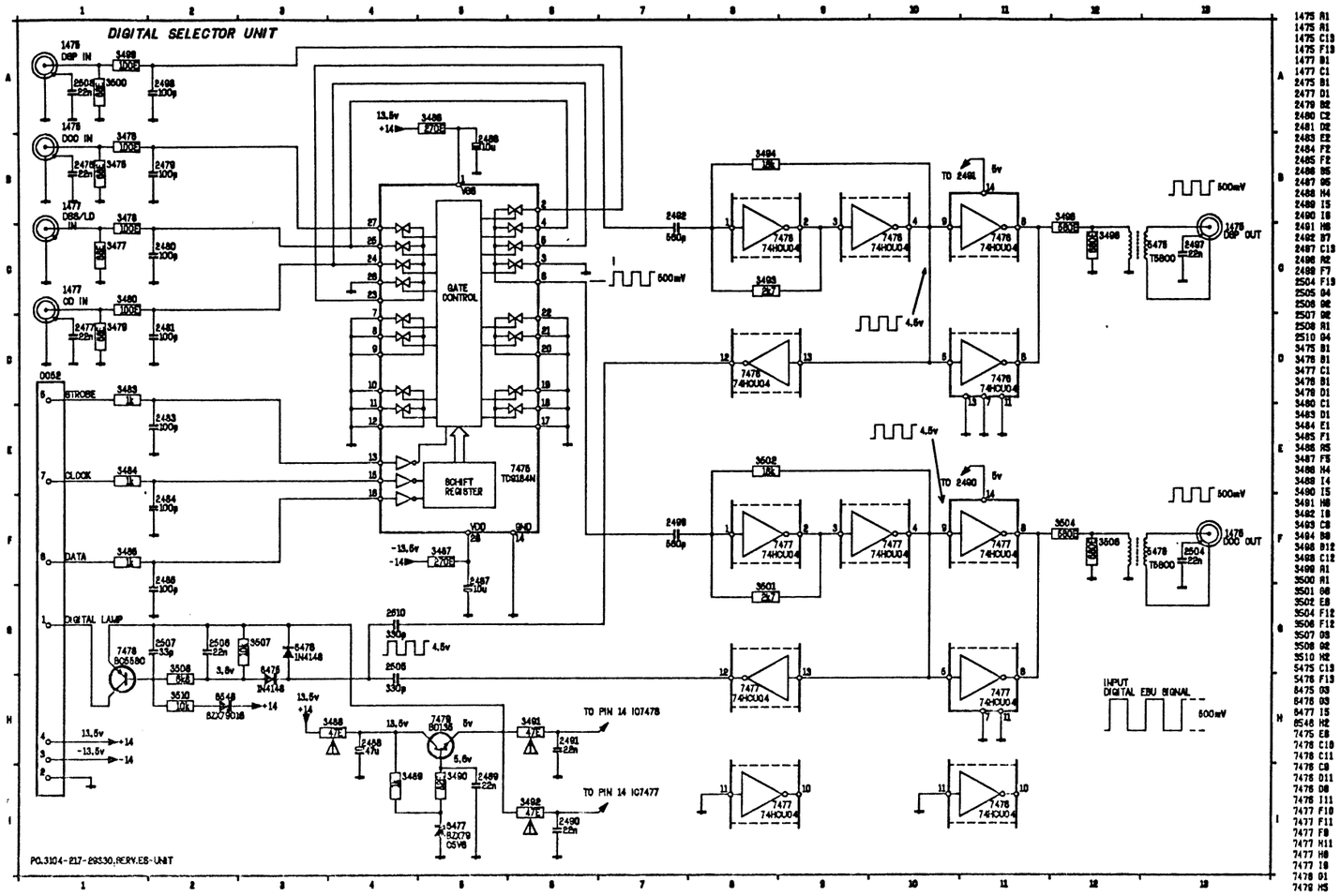

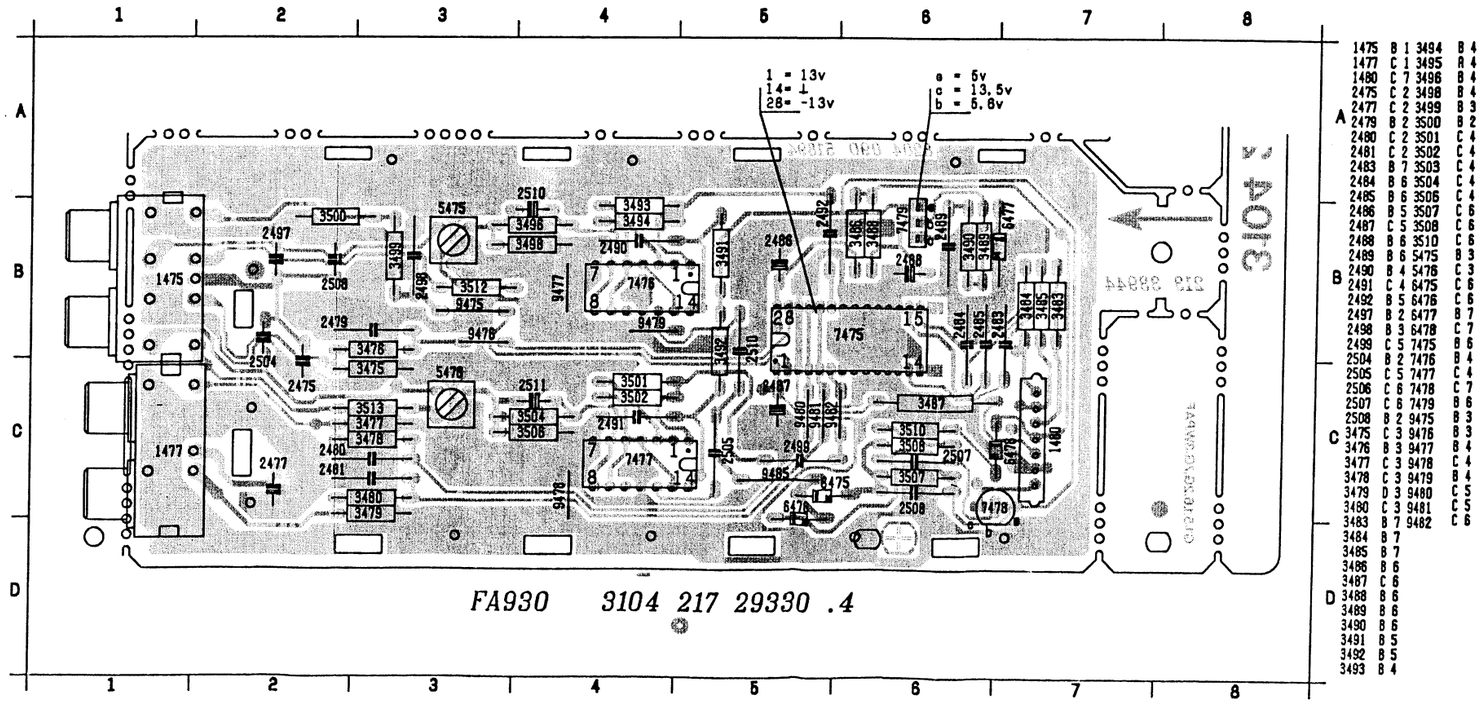

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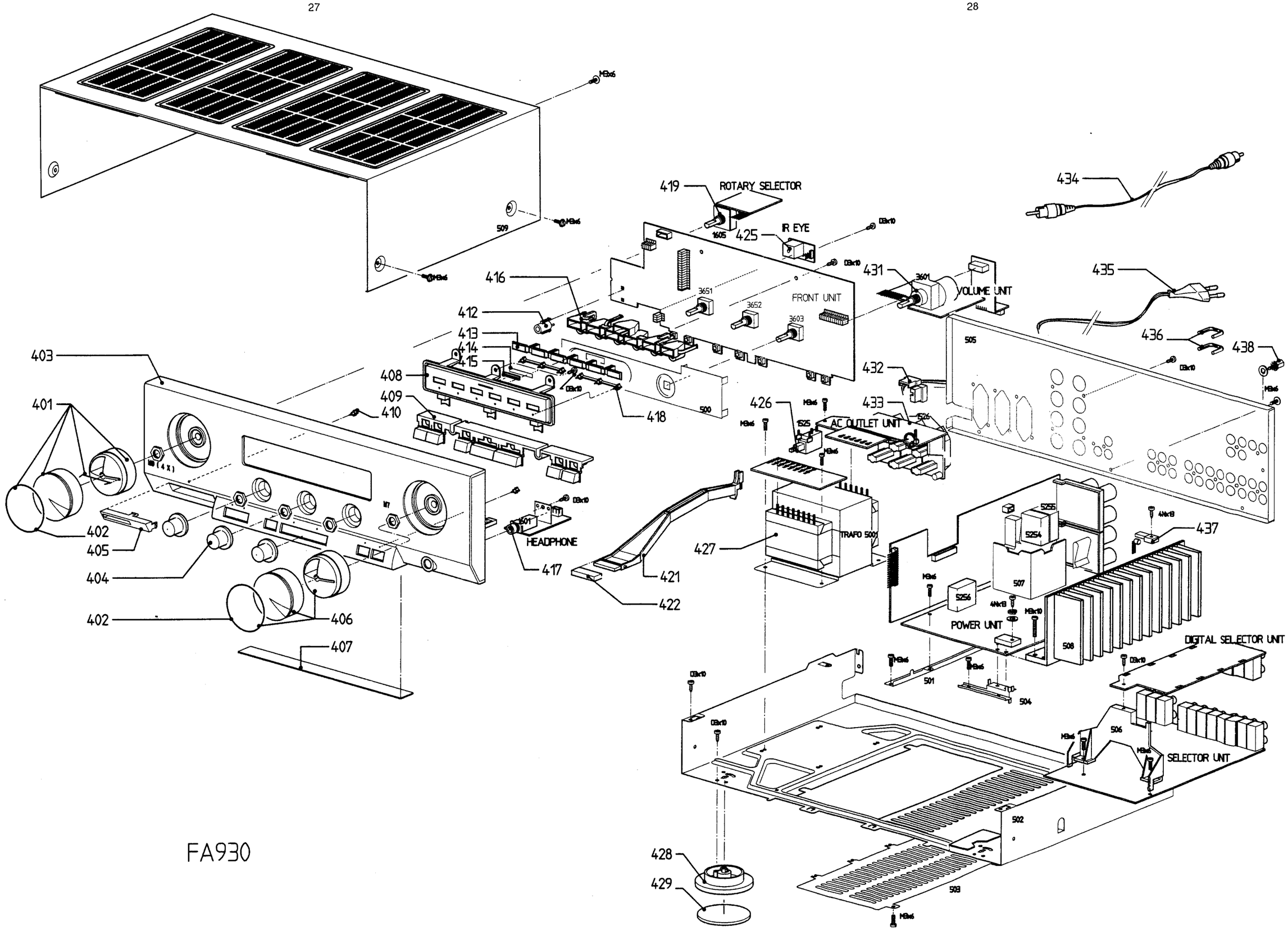
MECHANICAL PARTS

401	4822 410 61699	KNOB SOURCE SEL.ASSY
402	4822 532 21449	RUBBER RING
403	4822 426 51524	FRONT ASSY
404	4822 413 41696	KNOB ASSY
405	4822 450 61831	IR-WINDOW
406	4822 413 51399	VOLUME KNOB ASSY
407	4822 426 60621	STRIP
408	4822 454 12791	PLATE ORNAMENTAL
409	4822 410 61698	BUTTON ASSY
410	4822 380 20425	LED REFLECTOR
412	4822 255 41247	LEDHOLDER
413	4822 450 61832	WINDOW
414	4822 466 70734	DIFFUSOR
415	4822 130 91065	DIG.REFLECTOR
416	4822 466 70733	LIGHTSCREEN
417	4822 267 31453	HEADPHONE
418	4822 380 20424	REFLECTOR
419	4822 273 10237	ROTARY SWITCH
421	4822 404 21194	BRACKET
422	4822 462 71808	POWER CAP
425	4822 130 81254	IR EYE
426	4822 276 13224	POWER SWITCH
427	4822 146 31043	TRAFO
428	4822 462 41888	FOOT
429	4822 462 41887	FOOT FELT
431	4822 101 21175	VOLUME ASSY
432	4822 532 60948	BUSHING
433	4822 265 20544	MAINS OUTPUT
433	4822 265 20554	MAINS OUTPUT ONLY /05
434	4822 321 61478	CINCH CORD
435	4822 321 10789	MAINS CORD
436	4822 268 90449	JUMPER PLUG
437	4822 404 21195	TRANSISTOR BRACKET
438	4822 502 13921	PHONO GND SCREW
	4822 218 10439	REMOTE CONTROL (RH6640/01)



FA930

CS 57 511

FUSE'S

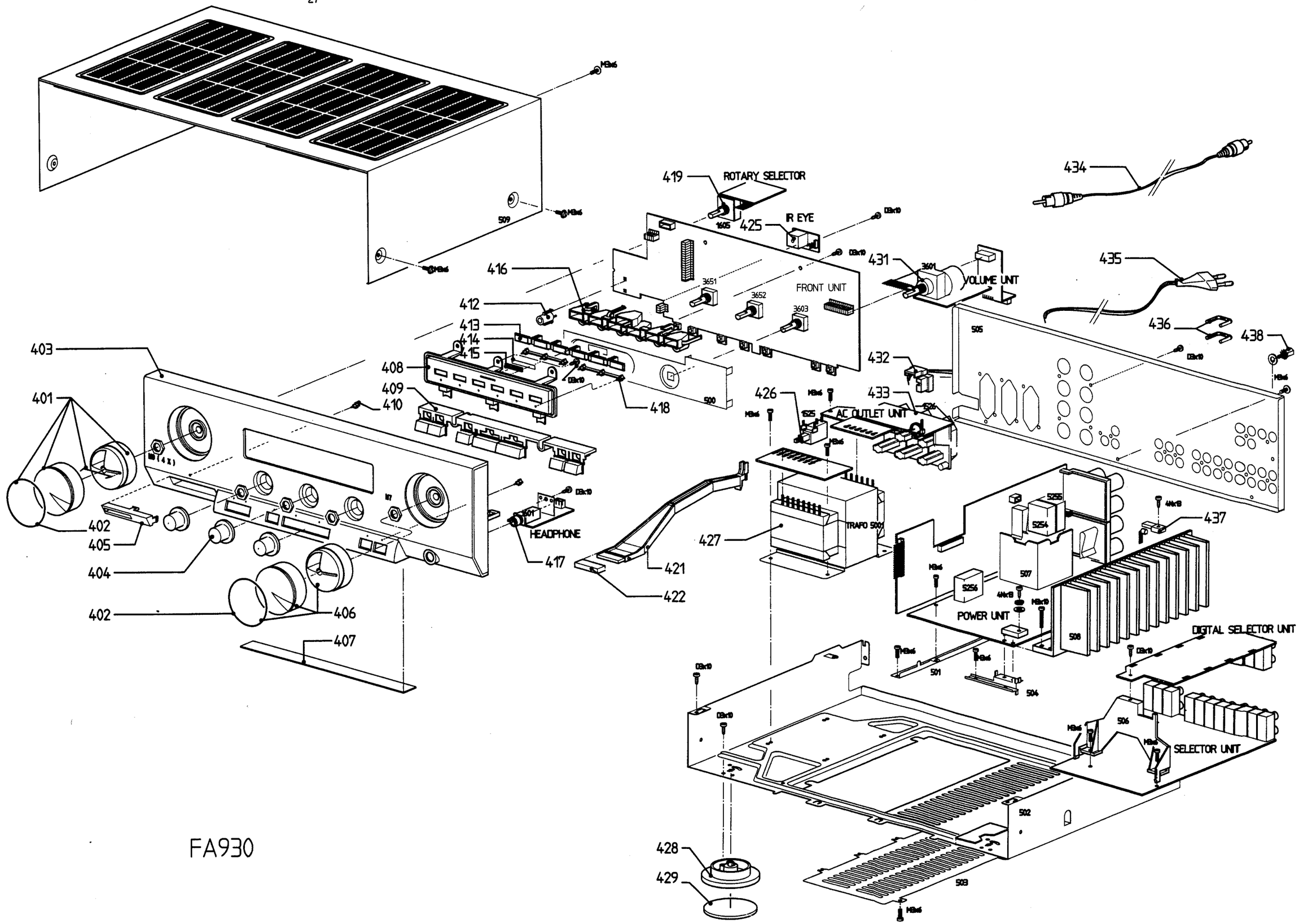
1250	4822 071 53152	FUSE 3.15A
1251	4822 071 53152	FUSE 3.15A
1252	4822 071 52502	FUSE 2.5A
1253	4822 071 52502	FUSE 2.5A
1259	4822 071 51002	FUSE 1A
1260	4822 071 51002	FUSE 1A
1531	4822 071 51002	FUSE 1A

MISCELLANEOUS

1261	4822 265 20542	pin jack
1262	4822 265 20543	pin jack
1263	4822 290 81479	4P scren Terminal
1264	4822 290 81479	4P scren Terminal
1401	4822 267 31451	pin jack
1402	4822 267 31451	pin jack
1403	4822 267 31449	pin jack
1475	4822 267 31452	pin jack
1477	4822 267 31448	pin jack
1525	4822 276 13224	Power Switch
1526	4822 265 20544	Mains outlet
1527	4822 265 20544	Mains outlet
1528	4822 265 20544	Mains outlet
1601	4822 267 31453	Phone Socket
1605	4822 273 10237	Rotery Encoder
1606	4822 276 13213	Tact Switch
1607	4822 276 13213	Tact Switch
1608	4822 276 13213	Tact Switch
1609	4822 276 13213	Tact Switch
1610	4822 276 13213	Tact Switch
1611	4822 276 13213	Tact Switch
1612	4822 276 13213	Tact Switch
1620	4822 134 41102	12V 75mA
1621	4822 134 41102	12V 75mA
1622	4822 134 41102	12V 75mA
1623	4822 134 41102	12V 75mA
1624	4822 134 41102	12V 75mA
1625	4822 134 41102	12V 75mA
1626	4822 134 41102	12V 75mA
	4822 736 21313	Inst.For Use

CAPACITORS

2250	4822 124 40244	2,2µF 20% 63V
2251	4822 124 40244	2,2µF 20% 63V
2254	4822 122 31435	470pF 10% 50V
2255	4822 122 31435	470pF 10% 50V
2258	4822 124 41554	220µF 20% 10V
2259	4822 124 41554	220µF 20% 10V
2260	4822 124 41643	100µF 20% 16V
2261	4822 124 41643	100µF 20% 16V
2262	4822 122 10181	47pF 5% 50V
2263	4822 122 10181	47pF 5% 50V
2264	4822 122 33308	100pF 10% 500V
2265	4822 122 33308	100pF 10% 500V
2268	4822 122 10173	820pF 10% 50V
2269	4822 122 10173	820pF 10% 50V
2270	4822 124 40255	100µF 50% 63V
2271	4822 124 40255	100µF 50% 63V
2272	4822 122 10158	1nF 10% 50V
2273	4822 122 10158	1nF 10% 50V
2274	4822 126 12017	47pF NPO 500V
2275	4822 126 12017	47pF NPO 500V
2276	4822 124 40178	100µF 20% 10V
2277	4822 124 40178	100µF 20% 10V
2278	4822 124 41596	22µF 20% 50V
2279	4822 124 41596	22µF 20% 50V
2280	4822 122 10183	100pF 5% 50V
2281	4822 122 10183	100pF 5% 50V
2282	4822 122 10177	10nF 20% 25V
2283	4822 122 10177	10nF 20% 25V
2284	4822 121 41984	47nF 10% 400V
2285	4822 121 41984	47nF 10% 400V
2286	4822 126 11311	4,7nF 50V
2287	4822 126 11311	4,7nF 50V
2288	4822 126 11311	4,7nF 50V
2289	4822 126 11311	4,7nF 50V
2290	5322 121 42491	47nF 5% 100V
2292	5322 121 42489	33nF 5% 250V
2293	4822 124 41678	22µF 20% 25V
2294	5322 121 42661	330nF 5% 63V
2295	5322 121 42386	100nF 5% 63V
2296	4822 124 40201	1000µF 20% 16V
2297	4822 124 41678	22µF 20% 25V
2298	4822 124 40244	2,2µF 20% 63V
2299	4822 122 10183	100pF 5% 50V
2300	4822 122 10183	100pF 5% 50V
2303	4822 121 43875	47nF 5% 250V
2305	4822 124 41998	2200µF 50V
2306	4822 124 41998	2200µF 50V
2307	4822 121 43875	47nF 5% 250V
2309	4822 121 43875	47nF 5% 250V
2310	4822 121 42007	100nF 10% 100V
2311	4822 121 42007	100nF 10% 100V
2312	4822 121 42007	100nF 10% 100V
2313	4822 121 41984	47nF 10% 400V
2314	4822 121 41984	47nF 10% 400V
2315	4822 121 41984	47nF 10% 400V
2316	4822 124 42367	3300µF 20% 35V
2317	5322 124 21189	100µF 20% 40V
2318	5322 124 21189	100µF 20% 40V
2319	4822 122 10158	1nF 10% 50V
2321	4822 122 10166	22nF 30% 16V
2322	4822 124 40433	47µF 20% 25V
2323	4822 124 40242	1µF 20% 63V
2324	4822 124 40242	1µF 20% 63V
2326	4822 124 42154	4700µF 80V
2327	4822 124 42154	4700µF 80V
2328	4822 122 10158	1nF 10% 50V
2330	4822 124 41334	470µF 20% 35V
2331	4822 124 40433	47µF 20% 25V
2401	4822 122 10183	100pF 5% 50V
2402	4822 122 10183	100pF 5% 50V
2403	4822 122 10183	100pF 5% 50V
2404	4822 122 10183	100pF 5% 50V
2405	4822 124 40242	1µF 20% 63V
2406	4822 124 40242	1µF 20% 63V
2407	4822 122 10158	1nF 10% 50V
2408	4822 122 10158	1nF 10% 50V
2409	4822 124 21212	15µF 20% 40V
2410	4822 124 21212	15µF 20% 40V
2411	4822 122 10177	10nF 20% 25V
2412	4822 122 10177	10nF 20% 25V
2413	4822 126 11309	2,7nF 10%Y5F 50V
2414	4822 126 11309	2,7nF 10%Y5F 50V
2415	4822 124 40435	10µF 20% 50V
2416	4822 124 40435	10µF 20% 50V
2417	4822 122 10183	100pF 5% 50V
2418	4822 122 10183	100pF 5% 50V
2419	4822 122 10166	22nF 30% 16V
2420	4822 122 10166	22nF 30% 16V
2421	4822 124 22427	47µF 20% 35V
2422	4822 124 40433	47µF 20% 25V
2423	4822 122 10183	100pF 5% 50V
2424	4822 122 10183	100pF 5% 50V
2425	4822 122 10183	100pF 5% 50V
2426	4822 122 10183	100pF 5% 50V
2427	4822 122 10183	100pF 5% 50V
2428	4822 122 10183	100pF 5% 50V
2429	4822 122 10183	100pF 5% 50V
2430	4822 122 10183	100pF 5% 50V
2431	4822 122 10183	100pF 5% 50V
2432	4822 122 10183	100pF 5% 50V
2433	4822 122 10183	100pF 5% 50V
2434	4822 122 10183	100pF 5% 50V
2435	4822 122 10183	100pF 5% 50V
2436	4822 122 10183	100pF 5% 50V
2437	4822 122 10183	100pF 5% 50V
2438	4822 122 10183	100pF 5% 50V
2439	4822 122 10183	100pF 5% 50V
2440	4822 122 10183	100pF 5% 50V
2441	4822 122 10183	100pF 5% 50V
2442	4822 122 10183	100pF 5% 50V
2443	4822 122 10166	22nF 30% 16V
2444	4822 122 10166	22nF 30% 16V
2445	4822 124 22427	47µF 20% 35V
2446	4822 124 40433	47µF 20% 25V
2447	4822 126 10003	33nF 30% 50V
2448	4822 122 10166	22nF 30% 16V
2449	4822 122 10166	22nF 30% 16V
2450	4822 122 10166	22nF 30% 16V
2451	4822 124 22427	47µF 20% 35V
2452	4822 124 40433	47µF 20% 25V
2453	4822 126 10003	33nF 30% 50V
2454	4822 122 10166	22nF 30% 16V
2464	4822 126 11005	4,7nF 20% 50V
2465	4822 126 11005	4,7nF 20% 50V
2466	4822 126 11005	4,7nF 20% 50V
2467	4822 126 11005	4,7nF 20% 50V
2468	4822 126 11005	4,7nF 20% 50V
2469	4822 126 11005	4,7nF 20% 50V
2470	4822 126 11005	4,7nF 20% 50V
2471	4822 126 11005	4,7nF 20% 50V
2472	4822 126 11005	4,7nF 20% 50V
2473	4822 126 11005	4,7nF 20% 50V
2474	4822 126 11005	4,7nF 20% 50V
2479	4822 122 10183	100pF 5% 50V
2480	4822 122 10183	100pF 5% 50V
2481	4822 122 10183	100pF 5% 50V
2483	4822 122 10183	100pF 5% 50V
2484	4822 122 10183	100pF 5% 50V
2485	4822 122 10183	100pF 5% 50V
2486	4822 124 40435	10µF 20% 50V
2487	4822 124 40435	10µF 20% 50V
2488	4822 124 40433	47µF 20% 25V
2489	4822 122 10166	22nF 30% 16V
2490	4822 122 10166	22nF 30% 16V
2491	4822 122 10166	22nF 30% 16V
2492	4822 122 31693	560pF 10% 50V
2498	4822 122 10183	100pF 5% 50V
2499	4822 122 31693	560pF 10% 50V
2505	4822 122 31466	330pF 10% 50V
2506	4822 122 10166	22nF 30% 16V
2507	4822 122 10179	33pF 5% 50V
2600	4822 124 40435	10µF 20% 50V
2601	4822 121 41754	82nF 10% 100V
2602	4822 121 41754	82nF 10% 100V
2603	4822 124 23176	22µF 20% 16V
2604	4822 124 23176	22µF 20% 16V
2605	4822 122 10171	180pF 10% 50V
2606	4822 122 10171	180pF 10% 50V
2607	4822 122 10183	100pF 5% 50V
2608	4822 122 10183	100pF 5% 50V
2609	4822 122 10183	100pF 5% 50V
2610	4822 122 10183	100pF 5% 50V
2611	4822 124 23179	10µF 20% 16V
2612	4822 124 23179	10µF 20% 16V
2613	4822 124 42368	22µF 35V
2614	4822 124 42368	22µF 35V
2615	4822 122 10166	22nF 30% 16V
2616	4822 122 10166	22nF 30% 16V
2617	4822 122 10177	10nF 20% 25V
2618	4822 124 40242	1µF 20% 63V
2619	4822 122 10177	10nF 20% 25V
2621	4822 121 51409	120nF 5% 63V
2622	4822 121 51409	120nF 5% 63V
2623	4822 121 51409	120nF 5% 63V



FA930

CS 57 511

MISCELLANEOUS

1250	4822 071 53152	FUSE T3.15A
1251	4822 071 53152	FUSE T3.15A
1252	4822 071 52502	FUSE T2.5A
1253	4822 071 52502	FUSE T2.5A
1259	4822 071 51002	FUSE T1A
1260	4822 071 51002	FUSE T1A
1261	4822 265 20542	PIN JACK
1262	4822 265 20543	PIN JACK
1263	4822 290 81479	4 SCREW TERMINAL
1264	4822 290 81479	4 SCREW TERMINAL
1401	4822 267 31451	PIN JACK
1402	4822 267 31451	PIN JACK
1403	4822 267 31449	PIN JACK
1475	4822 267 31452	PIN JACK
1477	4822 267 31448	PIN JACK
1525	4822 276 13224	POWER SWITCH
1526	4822 265 20594	MAINS OUTLET
1527	4822 265 20594	MAINS OUTLET
1528	4822 265 20594	MAINS OUTLET
1531	4822 071 51002	FUSE 1A
1532	4822 272 10315	VOLT SEL.(ONLY/01S)
1601	4822 267 31453	PHONE SOCKET
1605	4822 273 10237	ROTERY ENCODER
1606	4822 276 13213	TACT SWITCH
1607	4822 276 13213	TACT SWITCH
1608	4822 276 13213	TACT SWITCH
1609	4822 276 13213	TACT SWITCH
1610	4822 276 13213	TACT SWITCH
1611	4822 276 13213	TACT SWITCH
1612	4822 276 13213	TACT SWITCH
1620	4822 134 41102	12V 75mA
1621	4822 134 41102	12V 75mA
1622	4822 134 41102	12V 75mA
1623	4822 134 41102	12V 75mA
1624	4822 134 41102	12V 75mA
1625	4822 134 41102	12V 75mA
1626	4822 134 41102	12V 75mA

CAPACITORS

2250	4822 124 40244	2,2µF 20% 63V
2251	4822 124 40244	2,2µF 20% 63V
2254	4822 122 31435	470pF 10% 50V
2255	4822 122 31435	470pF 10% 50V
2258	4822 124 40196	220µF 20% 16V
2259	4822 124 40196	220µF 20% 16V
2260	4822 124 41643	100µF 20% 16V
2261	4822 124 41643	100µF 20% 16V
2262	4822 122 10181	47pF 5% 50V
2263	4822 122 10181	47pF 5% 50V
2264	4822 122 33308	100pF 10% 500V
2265	4822 122 33308	100pF 10% 500V
2268	4822 122 10173	820pF 10% 50V
2269	4822 122 10173	820pF 10% 50V
2270	4822 124 40255	100µF 20% 63V
2271	4822 124 40255	100µF 20% 63V
2272	4822 122 10158	1nF 10% 50V
2273	4822 122 10158	1nF 10% 50V
2274	4822 126 12017	47pF NPO 500V
2275	4822 126 12017	47pF NPO 500V
2276	4822 124 41584	100µF 20% 10V
2277	4822 124 41584	100µF 20% 10V
2278	4822 124 41596	22µF 20% 50V
2279	4822 124 41596	22µF 20% 50V
2280	4822 122 10183	100pF 5% 50V
2281	4822 122 10183	100pF 5% 50V
2282	4822 122 10177	10nF 20% 25V
2283	4822 122 10177	10nF 20% 25V
2284	4822 121 41984	47nF 10% 400V
2285	4822 121 41984	47nF 10% 400V
2286	4822 126 11311	4,7nF 50V
2287	4822 126 11311	4,7nF 50V
2288	4822 126 11311	4,7nF 50V
2289	4822 126 11311	4,7nF 50V
2290	4822 121 43526	47nF 5% 100V
2292	4822 121 41854	150nF 5% 63V
2293	5322 124 41431	22µF 20% 35V
2294	5322 121 42661	330nF 5% 63V
2295	5322 121 42386	100nF 5% 63V
2296	4822 124 40201	1000µF 20% 16V
2297	5322 124 41431	22µF 20% 35V
2298	4822 124 40244	2,2µF 20% 63V
2299	4822 122 10183	100pF 5% 50V
2300	4822 122 10183	100pF 5% 50V
2303	4822 121 43875	47nF 5% 250V
2305	4822 124 41998	2200µF 50V
2306	4822 124 41998	2200µF 50V
2307	4822 121 43875	47nF 5% 250V
2309	4822 121 43875	47nF 5% 250V
2310	4822 121 42007	100nF 10% 100V
2311	4822 121 42007	100nF 10% 100V
2312	4822 121 42007	100nF 10% 100V
2313	4822 121 41984	47nF 10% 400V
2314	4822 121 41984	47nF 10% 400V
2315	4822 121 41984	47nF 10% 400V
2316	4822 124 42367	3300µF 20% 35V
2317	5322 124 21189	100µF 20% 40V
2318	5322 124 21189	100µF 20% 40V
2319	4822 122 10158	1nF 10% 50V
2321	4822 122 10166	22nF 30% 16V
2322	4822 124 40433	47µF 20% 25V
2323	4822 124 40242	1µF 20% 63V
2324	4822 124 40242	1µF 20% 63V
2326	4822 124 42154	4700µF 80V
2327	4822 124 42154	4700µF 80V
2328	4822 122 10158	1nF 10% 50V
2330	4822 124 41334	470µF 20% 35V
2331	4822 124 40433	47µF 20% 25V
2401	4822 122 10183	100pF 5% 50V
2402	4822 122 10183	100pF 5% 50V
2403	4822 122 10183	100pF 5% 50V
2404	4822 122 10183	100pF 5% 50V
2405	4822 124 40242	1µF 20% 63V
2406	4822 124 40242	1µF 20% 63V
2407	4822 122 10158	1nF 10% 50V
2408	4822 122 10158	1nF 10% 50V
2409	4822 124 21212	15µF 20% 40V
2410	4822 124 21212	15µF 20% 40V
2411	4822 122 10177	10nF 20% 25V
2412	4822 122 10177	10nF 20% 25V
2413	4822 126 11309	2,7nF 10%Y5F 50V
2414	4822 126 11309	2,7nF 10%Y5F 50V
2415	4822 124 40435	10µF 20% 50V
2416	4822 124 40435	10µF 20% 50V
2417	4822 122 10183	100pF 5% 50V
2418	4822 122 10183	100pF 5% 50V
2419	4822 122 10166	22nF 30% 16V
2420	4822 122 10166	22nF 30% 16V
2421	4822 124 22347	47µF 50V
2422	4822 124 40433	47µF 20% 25V
2423	4822 122 10183	100pF 5% 50V
2424	4822 122 10183	100pF 5% 50V
2425	4822 122 10183	100pF 5% 50V
2426	4822 122 10183	100pF 5% 50V
2427	4822 122 10183	100pF 5% 50V
2428	4822 122 10183	100pF 5% 50V
2429	4822 122 10183	100pF 5% 50V
2430	4822 122 10183	100pF 5% 50V
2431	4822 122 10183	100pF 5% 50V
2432	4822 122 10183	100pF 5% 50V
2433	4822 122 10183	100pF 5% 50V
2434	4822 122 10183	100pF 5% 50V
2435	4822 122 10183	100pF 5% 50V
2436	4822 122 10183	100pF 5% 50V
2437	4822 122 10183	100pF 5% 50V
2438	4822 122 10183	100pF 5% 50V
2439	4822 122 10183	100pF 5% 50V
2440	4822 122 10183	100pF 5% 50V
2441	4822 122 10183	100pF 5% 50V
2442	4822 122 10183	100pF 5% 50V
2443	4822 122 10166	22nF 30% 16V
2444	4822 122 10166	22nF 30% 16V
2445	4822 124 22347	47µF 50V
2446	4822 124 40433	47µF 20% 25V
2447	4822 126 10003	33nF 30% 50V
2448	4822 122 10166	22nF 30% 16V
2449	4822 122 10166	22nF 30% 16V
2450	4822 122 10166	22nF 30% 16V
2451	4822 124 22347	47µF 50V
2452	4822 124 40433	47µF 20% 25V
2453	4822 126 10003	33nF 30% 50V
2454	4822 122 10166	22nF 30% 16V
2464	4822 126 11005	4,7nF 20% 50V
2465	4822 126 11005	4,7nF 20% 50V
2466	4822 126 11005	4,7nF 20% 50V
2467	4822 126 11005	4,7nF 20% 50V
2468	4822 126 11005	4,7nF 20% 50V
2469	4822 126 11005	4,7nF 20% 50V
2470	4822 126 11005	4,7nF 20% 50V
2471	4822 126 11005	4,7nF 20% 50V
2472	4822 126 11005	4,7nF 20% 50V
2473	4822 126 11005	4,7nF 20% 50V
2474	4822 126 11005	4,7nF 20% 50V
2475	4822 126 10781	470pF 50V
2476	4822 126 10781	470pF 50V
2479	4822 122 10183	100pF 5% 50V
2480	4822 122 10183	100pF 5% 50V
2481	4822 122 10183	100pF 5% 50V
2483	4822 122 10183	100pF 5% 50V
2484	4822 122 10183	100pF 5% 50V
2485	4822 122 10183	100pF 5% 50V
2486	4822 124 40435	10µF 20% 50V
2487	4822 124 40435	10µF 20% 50V
2488	4822 124 40433	47µF 20% 25V
2489	4822 122 10166	22nF 30% 16V
2490	4822 122 10166	22nF 30% 16V
2491	4822 122 10166	22nF 30% 16V
2492	4822 122 10172	220pF 10% 50V
2497	4822 126 10781	470pF 50V
2498	4822 122 10183	100pF 5% 50V
2499	4822 122 10172	220pF 10% 50V
2504	4822 126 10781	470pF 50V
2505	4822 122 31466	330pF 10% 50V
2506	4822 122 10166	22nF 30% 16V
2507	4822 122 10179	33pF 5% 50V
2508	4822 126 10781	470pF 50V
2510	4822 122 31466	330pF 10% 50V
2600	4822 124 40435	10µF 20% 50V
2601	4822 121 41754	82nF 10% 100V
2602	4822 121 41754	82nF 10% 100V
2603	4822 124 23179	EL 10µF 16V
2604	4822 124 23179	EL 10µF 16V
2605	4822 122 10181	47pF 5% 50V
2606	4822 122 10181	47pF 5% 50V
2607	4822 122 10183	100pF 5% 50V
2608	4822 122 10183	100pF 5% 50V
2609	4822 122 10183	100pF 5% 50V
2610	4822 122 10183	100pF 5% 50V
2611	4822 124 23176	EL 22µF 16V
2612	4822 124 23176	EL 22µF 16V
2613	4822 124 42368	22µF 35V
2614	4822 124 42368	22µF 35V

2624	4822 121 51409	120nF 5% 63V
2625	4822 126 11311	4,7nF 50V
2626	4822 126 11311	4,7nF 50V
2627	4822 124 41969	1µF 20% 50V
2628	4822 124 41969	1µF 20% 50V
2629	4822 122 10183	100pF 5% 50V
2630	4822 122 10183	100pF 5% 50V
2631	4822 122 33997	56pF 5%NPO
2632	4822 122 33997	56pF 5%NPO
2633	4822 124 23176	22µF 20% 16V
2634	4822 124 23176	22µF 20% 16V
2635	4822 122 10166	22nF 30% 16V
2636	4822 122 10166	22nF 30% 16V
2637	4822 124 42368	22µF 35V
2638	4822 124 42368	22µF 35V
2639	4822 126 12018	22nF 30% 16V
2640	4822 121 51245	220nF 63V
2641	4822 124 22347	47µF 50V
2642	4822 122 31693	560pF 10% 50V
2643	4822 124 40246	4,7µF 20% 63V
2644	4822 124 40242	1µF 20% 63V
2661	4822 122 10166	22nF 30% 16V
2662	4822 122 10166	22nF 30% 16V
2663	4822 122 10158	1nF 10% 50V
2664	4822 121 51245	220nF 63V
2667	4822 124 23176	22µF 20% 16V
2668	4822 121 43041	560nF 10% 63V
2670	4822 121 41545	0,033µF 10% 250V
2672	4822 122 10177	10nF 20% 25V
2680	4822 122 10177	10nF 20% 25V
2681	4822 122 10177	10nF 20% 25V

RESISTORS

3250	4822 050 23302	3k3 1% 0,6W
3252	4822 050 21002	1k 1% 0,6W
3253	4822 050 21002	1k 1% 0,6W
3254	4822 050 22203	22k 1% 0,6W
3255	4822 050 24703	47k 1% 0,6W
3256	4822 050 21003	10k 1% 0,6W
3257	4822 050 24703	47k 1% 0,6W
3258	4822 050 22203	22k 1% 0,6W
3259	4822 050 22203	22k 1% 0,6W
3260	4822 050 24703	47k 1% 0,6W
3261	4822 050 24703	47k 1% 0,6W
3262	4822 050 21803	18k 1% 0,6W
3263	4822 050 24703	47k 1% 0,6W
3264	4822 050 21002	1k 1% 0,6W
3265	4822 050 21002	1k 1% 0,6W
3266	4822 116 52224	470Ω 5% 0,5W
3267	4822 116 52224	470Ω 5% 0,5W
3268	4822 050 22203	22k 1% 0,6W
3269	4822 050 22203	22k 1% 0,6W
3270	4822 053 10122	1k2 5% 1W
3271	4822 053 10122	1k2 5% 1W
3272	4822 052 10681	680Ω 5% 0,33W
3273	4822 052 10681	680Ω 5% 0,33W
3274	4822 050 22202	2k2 1% 0,6W
3275	4822 050 22202	2k2 1% 0,6W
3276	4822 050 16809	68Ω 1% 0,4W
3277	4822 050 16809	68Ω 1% 0,4W
3278	4822 112 41112	1k5 5% 5,8W
3279	4822 112 41112	1k5 5% 5,8W
3280	4822 053 12152	1k5 5% 3W
3281	4822 053 12152	1k5 5% 3W
3282	4822 050 22202	2k2 1% 0,6W
3283	4822 050 22202	2k2 1% 0,6W
3284	4822 101 10927	470Ω
3285	4822 101 10927	470Ω
3286	4822 050 28201	820Ω 1% 0,6W
3287	4822 050 28201	820Ω 1% 0,6W
3288	4822 053 10302	3k 5% 1W
3289	4822 053 10302	3k 5% 1W
3290	4822 053 10222	2k2 5% 1W
3291	4822 053 10222	2k2 5% 1W
3292	4822 051 10101	100Ω 2% 0,25W
3293	4822 051 10101	100Ω 2% 0,25W
3294	4822 050 21801	180Ω 1% 0,6W
3295	4822 050 21801	180Ω 1% 0,6W
3296	4822 050 22201	220Ω 1% 0,6W
3297	4822 050 22201	220Ω 1% 0,6W
3298	4822 116 52224	470Ω 5% 0,5W
3299	4822 116 52224	470Ω 5% 0,5W
3300	4822 116 52263	2k7 5% 0,5W
3301	4822 116 52263	2k7 5% 0,5W
3302	4822 116 52224	470Ω 5% 0,5W
3303	4822 116 52224	470Ω 5% 0,5W
3304	4822 113 80525	OR15 10% 3W
3305	4822 113 80525	OR15 10% 3W
3306	4822 113 80525	OR15 10% 3W
3307	4822 113 80525	OR15 10% 3W
3308	4822 050 28203	82k 1% 0,6W
3309	4822 050 28203	82k 1% 0,6W
3310	4822 050 22204	220k 1% 0,6W
3311	4822 050 22203	22k 1% 0,6W
3312	4822 050 13303	33k 1% 0,4W
3313	4822 050 22203	22k 1% 0,6W
3314	4822 050 26803	68k 1% 0,6W
3315	4822 050 21501	150Ω 1% 0,6W
3316	4822 050 24702	4k7 1% 0,6W
3318	4822 050 21002	1k 1% 0,6W
3319	4822 050 21002	1k 1% 0,6W
3320	4822 050 21003	10k 1% 0,6W
3321	4822 050 21003	10k 1% 0,6W
3328	4822 050 21502	1k5 1% 0,6W
3329	4822 050 21502	1k5 1% 0,6W
3330	4822 050 21003	10k 1% 0,6W
3331	4822 050 21003	10k 1% 0,6W
3332	4822 050 23302	3k3 1% 0,6W
3333	4822 116 80564	220Ω 5%

3340	4822 050 22204	220k 1% 0,6W
3341	4822 050 22204	220k 1% 0,6W
3342	4822 116 80562	10Ω 5%
3343	4822 116 80311	4Ω7 5%
3344	4822 050 21802	1k8 1% 0,6W
3345	4822 050 21202	1k2 1% 0,6W
3346	4822 053 12391	390Ω 5% 3W
3347	4822 053 12391	390Ω 5% 3W
3348	4822 050 21201	120Ω 1% 0,6W
3349	4822 050 21201	SFR25H
3350	4822 052 10229	22Ω 5% 0,33W
3354	4822 116 52224	470Ω 5% 0,5W
3355	4822 116 52224	470Ω 5% 0,5W
3356	4822 051 10101	100Ω 2% 0,25W
3357	4822 051 10101	100Ω 2% 0,25W
3358	4822 116 80311	4Ω7 5%
3359	4822 116 80311	4Ω7 5%
3360	4822 116 80562	10Ω 5%
3361	4822 116 80562	10Ω 5%
3364	4822 050 22204	220k 1% 0,6W
3365	4822 050 22204	220k 1% 0,6W
3368	4822 116 80562	10Ω 5%
3369	4822 116 80562	10Ω 5%
3370	4822 050 22203	22k 1% 0,6W
3371	4822 050 22203	22k 1% 0,6W
3372	4822 050 22203	22k 1% 0,6W
3401	4822 050 23901	390Ω 1% 0,6W
3402	4822 050 23901	390Ω 1% 0,6W
3403	4822 116 52272	330k 5% 0,5W
3404	4822 116 52272	330k 5% 0,5W
3405	4822 050 25603	56k 1% 0,6W
3406	4822 050 25603	56k 1% 0,6W
3407	4822 050 23901	390Ω 1% 0,6W
3408	4822 050 23901	390Ω 1% 0,6W
3409	4822 051 10101	100Ω 2% 0,25W
3410	4822 051 10101	100Ω 2% 0,25W
3411	4822 051 10561	560Ω 2% 0,25W
3412	4822 051 10561	560Ω 2% 0,25W
3413	4822 116 52272	330k 5% 0,5W
3414	4822 116 52272	330k 5% 0,5W
3415	4822 116 52264	27k 5% 0,5W
3416	4822 116 52264	27k 5% 0,5W
3417	4822 051 10101	100Ω 2% 0,25W
3418	4822 051 10101	100Ω 2% 0,25W
3419	4822 116 52234	100k 5% 0,5W
3420	4822 116 52234	100k 5% 0,5W
3421	4822 050 22201	220Ω 1% 0,6W
3422	4822 050 22201	220Ω 1% 0,6W
3423	4822 051 10101	100Ω 2% 0,25W
3424	4822 051 10101	100Ω 2% 0,25W
3425	4822 051 10101	100Ω 2% 0,25W
3426	4822 051 10101	100Ω 2% 0,25W
3427	4822 051 10101	100Ω 2% 0,25W
3428	4822 051 10101	100Ω 2% 0,25W
3429	4822 051 10101	100Ω 2% 0,25W
3430	4822 051 10101	100Ω 2% 0,25W
3431	4822 051 10101	100Ω 2% 0,25W
3432	4822 051 10101	100Ω 2% 0,25W
3433	4822 051 10101	100Ω 2% 0,25W
3434	4822 051 10101	100Ω 2% 0,25W
3435	4822 051 10101	100Ω 2% 0,25W
3436	4822 051 10101	100Ω 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10101	100Ω 2% 0,25W
3439	4822 051 10101	100Ω 2% 0,25W
3440	4822 051 10101	100Ω 2% 0,25W
3441	4822 051 10101	100Ω 2% 0,25W
3442	4822 051 10101	100Ω 2% 0,25W
3443	4822 116 52217	270Ω 5% 0,5W
3444	4822 116 52217	270Ω 5% 0,5W
3445	4822 116 52217	270Ω 5% 0,5W
3446	4822 116 52217	270Ω 5% 0,5W
3447	4822 050 23302	3k3 1% 0,6W
3448	4822 050 23302	3k3 1% 0,6W
3455	4822 050 28209	82Ω 1% 0,6W
3475	4822 050 16809	68Ω 1% 0,4W
3476	4822 051 10101	100Ω 2% 0,25W
3477	4822 050 16809	68Ω 1% 0,4W
3478	4822 051 10101	100Ω 2% 0,25W
3479	4822 050 16809	68Ω 1% 0,4W
3480	4822 051 10101	100Ω 2% 0,25W
3483	4822 050 21002	1k 1% 0,6W
3484	4822 050 21002	1k 1% 0,6W
3485	4822 050 21002	1k 1% 0,6W
3486	4822 116 52217	270Ω 5% 0,5W
3487	4822 116 52217	270Ω 5% 0,5W
3488	4822 116 80335	47Ω
3489	4822 050 21002	1k 1% 0,6W
3490	4822 050 28209	82Ω 1% 0,6W
3491	4822 116 80335	47Ω
3492	4822 116 80335	47Ω
3493	4822 116 52263	2k7 5% 0,5W
3494	4822 050 21803	18k 1% 0,6W
3495	4822 050 21002	1k 1% 0,6W
3496	4822 051 10561	560Ω 2% 0,25W
3498	4822 050 26201	620Ω 1% 0,6W
3499	4822 051 10101	100Ω 2% 0,25W
3500	4822 050 16809	68Ω 1% 0,4W
3501	4822 116 52263	2k7 5% 0,5W
3502	4822 050 21803	18k 1% 0,6W
3503	4822 050 21002	1k 1% 0,6W
3504	4822 051 10561	560Ω 2% 0,25W
3506	4822 050 26201	620Ω 1% 0,6W
3507	4822 050 21003	10k 1% 0,6W
3508	4822 050 26802	6k8 1% 0,6W
3600	4822 050 24702	4k7 1% 0,6W
3601	4822 101 21175	50k
3603	4822 101 21176	100k

3605	4822 050 15602	5k6 1% 0,4W
3606	4822 050 15602	5k6 1% 0,4W
3607	4822 050 21203	12k 1% 0,6W
3608	4822 050 21203	12k 1% 0,6W
3609	4822 050 21002	1k 1% 0,6W
3610	4822 050 21002	1k 1% 0,6W
3611	4822 050 13303	33k 1% 0,4W
3612	4822 050 13303	33k 1% 0,4W
3613	4822 050 21002	1k 1% 0,6W
3614	4822 050 21002	1k 1% 0,6W
3615	4822 050 21002	1k 1% 0,6W
3616	4822 050 21002	1k 1% 0,6W
3617	4822 050 22202	2k2 1% 0,6W
3618	4822 050 22202	2k2 1% 0,6W
3619	4822 116 80335	47Ω
3620	4822 116 80335	47Ω
3621	4822 051 10101	100Ω 2% 0,25W
3622	4822 051 10101	100Ω 2% 0,25W
3623	4822 050 24702	4k7 1% 0,6W
3624	4822 050 24702	4k7 1% 0,6W
3625	4822 051 10561	560Ω 2% 0,25W
3626	4822 051 10561	560Ω 2% 0,25W
3627	4822 050 24702	4k7 1% 0,6W
3628	4822 050 24702	4k7 1% 0,6W
3629	4822 051 10561	560Ω 2% 0,25W
3630	4822 051 10561	560Ω 2% 0,25W
3631	4822 050 22202	2k2 1% 0,6W
3632	4822 050 22202	2k2 1% 0,6W
3636	4822 050 21002	1k 1% 0,6W
3637	4822 050 21002	1k 1% 0,6W
3639	4822 116 52234	100k 5% 0,5W
3640	4822 050 24703	47k 1% 0,6W
3641	4822 050 24703	47k 1% 0,6W
3645	4822 050 28209	82Ω 1% 0,6W
3646	4822 050 28209	82Ω 1% 0,6W
3647	4822 050 24702	4k7 1% 0,6W
3648	4822 050 24702	4k7 1% 0,6W
3649	4822 051 10182	1k8 2% 0,25W
3650	4822 051 10182	1k8 2% 0,25W
3651	4822 101 21177	20k
3652	4822 101 21177	20k
3653	4822 050 24702	4k7 1% 0,6W
3654	4822 050 24702	4k7 1% 0,6W
3655	4822 051 10182	1k8 2% 0,25W
3656	4822 051 10182	1k8 2% 0,25W
3657	4822 050 21801	180Ω 1% 0,6W
3658	4822 050 21801	180Ω 1% 0,6W
3659	4822 051 10101	100Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 050 25604	560k 1% 0,6W
3662	4822 050 25604	560k 1% 0,6W
3665	4822 116 80335	47Ω
3666	4822 116 80335	47Ω
3667	4822 050 15602	5k6 1% 0,4W
3668	4822 050 15602	5k6 1% 0,4W
3669	4822 050 21005	1M 1% 0,6W
3670	4822 050 21003	10k 1% 0,6W
3671	4822 116 52197	56Ω 5% 0,5W
3672	4822 050 21003	10k 1% 0,6W
3673	4822 050 21005	1M 1% 0,6W
3674	4822 050 21005	1M 1% 0,6W
3675	4822 050 23901	390Ω 1% 0,6W
3676	4822 051 10182	1k8 2% 0,25W
3677	4822 050 21003	10k 1% 0,6W
3678	4822 116 82366	2Ω2
3679	4822 053 11159	15Ω 5% 2W
3680	4822 050 23302	3k3 1% 0,6W
3681	4822 050 24703	47k 1% 0,6W
3682	4822 050 21003	10k 1% 0,6W
3693	4822 116 80311	4Ω7 5%
3696	4822 051 10561	560Ω 2% 0,25W
3697	4822 051 10561	560Ω 2% 0,25W
3698	4822 051 10561	560Ω 2% 0,25W
3699	4822 051 10561	560Ω 2% 0,25W
3700	4822 051 10561	560Ω 2% 0,25W
3701	4822 051 10561	560Ω 2% 0,25W
3702	4822 051 10561	560Ω 2% 0,25W
3703	4822 051 10561	560Ω 2% 0,25W
3704	4822 051 10561	560Ω 2% 0,25W
3705	4822 050 21002	1k 1% 0,6W
3706	4822 050 21002	1k 1% 0,6W
3708	4822 050 21002	1k 1% 0,6W
3709	4822 050 21002	1k 1% 0,6W
3710	4822 050 21002	1k 1% 0,6W
3711	4822 050 21002	1k 1% 0,6W
3714	4822 050 21002	1k 1% 0,6W
3716	4822 050 22202	2k2 1% 0,6W
3717	4822 050 22202	2k2 1% 0,6W
3718	4822 050 22202	2k2 1% 0,6W
3719	4822 050 22202	2k2 1% 0,6W
3720	4822 050 22202	2k2 1% 0,6W
3721	4822 050 22202	2k2 1% 0,6W
3722	4822 050 22202	2k2 1% 0,6W
3724	4822 050 21003	10k 1% 0,6W
3726	4822 050 21003	10k 1% 0,6W
3728	4822 050 21803	18k 1% 0,6W
3730	4822 116 52264	27k 5% 0,5W
3731	4822 116 52264	27k 5% 0,5W
3732	4822 116 52264	27k 5% 0,5W
3733	4822 116 52264	27k 5% 0,5W
3734	4822 116 52264	27k 5% 0,5W
3739	4822 050 24703	47k 1% 0,6W
3740	4822 050 24703	47k 1% 0,6W
3741	4822 050 24703	47k 1% 0,6W
3742	4822 050 24703	47k 1% 0,6W
3744	4822 050 22203	22k 1% 0,6W
3745	4822 116 52235	1M 5% 0,5W
3750	4822 050 24702	4k7 1% 0,6W
3751	4822 050 24702	4k7 1% 0,6W

3752	4822 050 24702	4k7 1% 0,6W
3753	4822 050 24702	4k7 1% 0,6W

COILS

5001	4822 146 31043	Mains Trafo
5252	4822 157 62255	Coil
5253	4822 157 62255	Coil
5254	4822 280 70368	Relay 36V
5255	4822 280 70368	Relay 36V
5256	4822 280 70368	Relay 36V
5475	4822 148 80281	Coil
5476	4822 148 80281	Coil
5601	4822 101 21178	Coil
5602	4822 101 21178	Coil
5605	4822 242 72527	Resonator

DIODES

6250	4822 130 61219	BZX79-C10
6251	4822 130 61219	BZX79-C10
6252	4822 130 61219	BZX79-C10
6253	4822 130 61219	BZX79-C10
6254	4822 130 30621	1N4148
6255	4822 130 30621	1N4148
6256	4822 130 30842	BAV21
6257	4822 130 30842	BAV21
6258	5322 130 34563	BZX79-C2V7
6259	5322 130 34563	BZX79-C2V7
6260	4822 130 80235	BZX79-C3V3
6261	4822 130 80235	BZX79-C3V3
6262	4822 130 30842	BAV21
6263	4822 130 30842	BAV21
6264	4822 130 32213	BYV28-50
6265	4822 130 32213	BYV28-50
6266	4822 130 32213	BYV28-50
6267	4822 130 32213	BYV28-50
6268	4822 130 30621	1N4148
6269	4822 130 30621	1N4148
6270	4822 130 30621	1N4148
6271	4822 130 30621	1N4148
6272	4822 130 30621	1N4148
6273	4822 130 34278	BZX79-C6V8
6274	4822 130 30621	1N4148
6275	4822 130 30621	1N4148
6276	4822 130 30621	1N4148
6277	4822 130 30621	1N4148
6278	5322 130 30684	1N4002GP
6279	5322 130 30684	1N4002GP
6280	5322 130 30684	1N4002GP
6281	5322 130 30684	1N4002GP
6282	4822 130 34281	BZX79-C15
6283	4822 130 82078	D5SBA20
6284	4822 130 82079	D3SBA20
6286	4822 130 30621	1N4148
6287	4822 130 30621	1N4148
6288	4822 130 30621	1N4148
6289	4822 130 30621	1N4148
6290	4822 130 30621	1N4148
6291	4822 130 30621	1N4148
6292	4822 130 30621	1N4148
6293	4822 130 30621	1N4148
6294	4822 130 30621	1N4148
6295	4822 130 30621	1N4148
6296	4822 130 30621	1N4148
6297	4822 130 30621	1N4148
6298	4822 130 34281	BZX79-C15
6299	4822 130 30621	1N4148
6301	4822 130 34499	BZX79-C20
6302	4822 130 34268	BZX79-C16
6401	4822 130 31253	BZX79-C2V4
6475	4822 130 30621	1N4148
6476	4822 130 30621	1N4148
6477	4822 130 34173	BZX79-C5V6
6601	4822 130 30621	1N4148
6603	4822 130 30621	1N4148
6604	4822 130 34278	BZX79-C6V8
6605	4822 130 34278	BZX79-C6V8
6606	4822 130 30621	1N4148
6607	4822 130 30621	1N4148
6608	4822 130 30621	1N4148
6609	4822 130 30621	1N4148
6610	4822 130 30621	1N4148
6611	4822 130 30621	1N4148
6612	4822 130 34233	BZX79-C5V1
6613	4822 130 31253	BZX79-C2V4
6614	4822 130 34167	BZX79-C6V2
6615	4822 130 34174	BZX79-C4V7
6616	4822 130 34167	BZX79-C6V2
6632	4822 130 30621	1N4148
6633	4822 130 30621	1N4148
6634	4822 130 30621	1N4148
6635	4822 130 82911	LED
6636	4822 130 82911	LED
6637	4822 130 82911	LED
6638	4822 130 82911	LED
6639	4822 130 82911	LED
6640	4822 130 82911	LED
6641	4822 130 82911	LED
6642	4822 130 82911	LED
6643	4822 130 82911	LED
6644	4822 130 82911	LED
6645	4822 130 82911	LED
6646	4822 130 82911	LED
6647	4822 130 82911	LED
6648	4822 130 82911	LED
6690	5322 130 34834	BZX79-C3V6
6691	5322 130 34834	BZX79-C3V6

2615	4822 122 10166	22nF 30% 16V
2616	4822 122 10166	22nF 30% 16V
2617	4822 122 10177	10nF 20% 25V
2618	4822 124 40242	1µF 20% 63V
2619	4822 122 10177	10nF 20% 25V
2621	4822 121 51409	120nF 5% 63V
2622	4822 121 51409	120nF 5% 63V
2623	4822 121 51409	120nF 5% 63V
2624	4822 121 51409	120nF 5% 63V
2625	4822 126 11311	4,7nF 50V
2626	4822 126 11311	4,7nF 50V
2627	4822 124 41969	1µF 20% 50V
2628	4822 124 41969	1µF 20% 50V
2629	4822 122 10183	100pF 5% 50V
2630	4822 122 10183	100pF 5% 50V
2631	4822 122 33997	56pF 5%NPO
2632	4822 122 33997	56pF 5%NPO
2633	4822 124 23176	22µF 20% 16V
2634	4822 124 23176	22µF 20% 16V
2635	4822 122 10166	22nF 30% 16V
2636	4822 122 10166	22nF 30% 16V
2637	4822 124 42368	22µF 35V
2638	4822 124 42368	22µF 35V
2639	4822 122 10166	CERC TUB 22N
2640	4822 121 42408	220nF 5% 63V
2641	4822 124 22347	47µF 50V
2642	4822 122 31693	560pF 10% 50V
2643	4822 124 40246	4,7µF 20% 63V
2644	4822 124 40242	1µF 20% 63V
2661	4822 122 10166	22nF 30% 16V
2662	4822 122 10166	22nF 30% 16V
2663	4822 126 11311	CERAMIC 4N7
2664	4822 121 42408	220nF 5% 63V
2667	4822 124 23176	22µF 20% 16V
2668	4822 121 51412	560nF 5% 63V
2669	5322 121 42498	POL 680N
2670	5322 121 42498	POL 680N
2672	4822 126 11311	CERAMIC 4N7
2680	4822 122 10177	10nF 20% 25V
2681	4822 122 10177	10nF 20% 25V

RESISTORS

3250	4822 050 23302	3k3 1% 0,6W
3251	4822 050 24703	47k 1% 0,6W
3252	4822 050 21002	1k 1% 0,6W
3253	4822 050 21002	1k 1% 0,6W
3254	4822 050 22203	22k 1% 0,6W
3255	4822 050 24703	47k 1% 0,6W
3256	4822 050 21003	10k 1% 0,6W
3257	4822 050 24703	47k 1% 0,6W
3258	4822 050 22203	22k 1% 0,6W
3259	4822 050 22203	22k 1% 0,6W
3260	4822 050 24703	47k 1% 0,6W
3261	4822 050 24703	47k 1% 0,6W
3262	4822 050 21803	18k 1% 0,6W
3263	4822 050 24703	47k 1% 0,6W
3264	4822 050 21002	1k 1% 0,6W
3265	4822 050 21002	1k 1% 0,6W
3266	4822 050 23301	MET FLM 330Ω
3267	4822 050 23301	MET FLM 330Ω
3268	4822 050 22203	22k 1% 0,6W
3269	4822 050 22203	22k 1% 0,6W
3270	4822 053 10122	1k2 5% 1W
3271	4822 053 10122	1k2 5% 1W
3272	4822 052 10681	680Ω 5% 0,33W
3273	4822 052 10681	680Ω 5% 0,33W
3274	4822 050 22202	2k2 1% 0,6W
3275	4822 050 22202	2k2 1% 0,6W
3276	4822 050 16809	68Ω 1% 0,4W
3277	4822 050 16809	68Ω 1% 0,4W
3278	4822 112 41112	1k5 5% 5,8W
3279	4822 112 41112	1k5 5% 5,8W
3280	4822 053 12152	1k5 5% 3W
3281	4822 053 12152	1k5 5% 3W
3282	4822 050 22202	2k2 1% 0,6W
3283	4822 050 22202	2k2 1% 0,6W
3284	4822 101 10927	470Ω
3285	4822 101 10927	470Ω
3286	4822 116 52224	470Ω 5% 0,5W
3287	4822 116 52224	470Ω 5% 0,5W
3288	4822 053 10302	3k 5% 1W
3289	4822 053 10302	3k 5% 1W
3290	4822 053 10222	2k2 5% 1W
3291	4822 053 10222	2k2 5% 1W
3292	4822 051 10101	100Ω 2% 0,25W
3293	4822 051 10101	100Ω 2% 0,25W
3294	4822 116 52217	270Ω 5% 0,5W
3295	4822 116 52217	270Ω 5% 0,5W
3296	4822 116 52217	270Ω 5% 0,5W
3297	4822 116 52217	270Ω 5% 0,5W
3298	4822 116 52224	470Ω 5% 0,5W
3299	4822 116 52224	470Ω 5% 0,5W
3300	4822 116 52263	2k7 5% 0,5W
3301	4822 116 52263	2k7 5% 0,5W
3302	4822 116 52224	470Ω 5% 0,5W
3303	4822 116 52224	470Ω 5% 0,5W
3304	4822 113 80525	OR15 10% 3W
3305	4822 113 80525	OR15 10% 3W
3306	4822 113 80525	OR15 10% 3W
3307	4822 113 80525	OR15 10% 3W
3308	4822 050 28203	82k 1% 0,6W
3309	4822 050 28203	82k 1% 0,6W
3310	4822 050 21204	120k 1% 0,6W
3311	4822 050 22203	22k 1% 0,6W
3312	4822 050 13303	33k 1% 0,4W
3313	4822 050 22203	22k 1% 0,6W

3314	4822 050 26803	68k 1% 0,6W
3315	4822 050 21501	150Ω 1% 0,6W
3316	4822 050 24702	4k7 1% 0,6W
3318	4822 050 21002	1k 1% 0,6W
3319	4822 050 21002	1k 1% 0,6W
3320	4822 050 21003	10k 1% 0,6W
3321	4822 050 21003	10k 1% 0,6W
3328	4822 050 21502	1k5 1% 0,6W
3329	4822 050 21502	1k5 1% 0,6W
3330	4822 050 21003	10k 1% 0,6W
3331	4822 050 21003	10k 1% 0,6W
3332	4822 050 23302	3k3 1% 0,6W
3333	4822 052 10221	220Ω 5% 0,33W
3340	4822 050 22204	220k 1% 0,6W
3341	4822 050 22204	220k 1% 0,6W
3342	4822 052 10109	10Ω 5% 0,33W
3343	4822 052 10478	4Ω7 5% 0,33W
3344	4822 050 21802	1k8 1% 0,6W
3345	4822 050 21202	1k2 1% 0,6W
3346	4822 053 12391	390Ω 5% 3W
3347	4822 053 12391	390Ω 5% 3W
3348	4822 050 21201	120Ω 1% 0,6W
3349	4822 050 21201	120Ω 1% 0,6W
3359	4822 052 10229	22Ω 5% 0,33W
3354	4822 116 52224	470Ω 5% 0,5W
3355	4822 116 52224	470Ω 5% 0,5W
3356	4822 051 10101	100Ω 2% 0,25W
3357	4822 051 10101	100Ω 2% 0,25W
3358	4822 052 10478	4Ω7 5% 0,33W
3359	4822 052 10478	4Ω7 5% 0,33W
3360	4822 052 10479	47Ω 5% 0,33W
3361	4822 052 10479	47Ω 5% 0,33W
3364	4822 050 22204	220k 1% 0,6W
3365	4822 050 22204	220k 1% 0,6W
3370	4822 050 22203	22k 1% 0,6W
3371	4822 050 22203	22k 1% 0,6W
3372	4822 050 22203	22k 1% 0,6W
3401	4822 050 23901	390Ω 1% 0,6W
3402	4822 050 23901	390Ω 1% 0,6W
3403	4822 116 52272	330k 5% 0,5W
3404	4822 116 52272	330k 5% 0,5W
3405	4822 050 25603	56k 1% 0,6W
3406	4822 050 25603	56k 1% 0,6W
3407	4822 050 23901	390Ω 1% 0,6W
3408	4822 050 23901	390Ω 1% 0,6W
3409	4822 051 10101	100Ω 2% 0,25W
3410	4822 051 10101	100Ω 2% 0,25W
3411	4822 051 10561	560Ω 2% 0,25W
3412	4822 051 10561	560Ω 2% 0,25W
3413	4822 116 52272	330k 5% 0,5W
3414	4822 116 52272	330k 5% 0,5W
3415	4822 116 52264	27k 5% 0,5W
3416	4822 116 52264	27k 5% 0,5W
3417	4822 051 10101	100Ω 2% 0,25W
3418	4822 051 10101	100Ω 2% 0,25W
3419	4822 116 52234	100k 5% 0,5W
3420	4822 116 52234	100k 5% 0,5W
3421	4822 116 52217	270Ω 5% 0,5W
3422	4822 116 52217	270Ω 5% 0,5W
3423	4822 051 10101	100Ω 2% 0,25W
3424	4822 051 10101	100Ω 2% 0,25W
3425	4822 051 10101	100Ω 2% 0,25W
3426	4822 051 10101	100Ω 2% 0,25W
3427	4822 051 10101	100Ω 2% 0,25W
3428	4822 051 10101	100Ω 2% 0,25W
3429	4822 051 10101	100Ω 2% 0,25W
3430	4822 051 10101	100Ω 2% 0,25W
3431	4822 051 10101	100Ω 2% 0,25W
3432	4822 051 10101	100Ω 2% 0,25W
3433	4822 051 10101	100Ω 2% 0,25W
3434	4822 051 10101	100Ω 2% 0,25W
3435	4822 051 10101	100Ω 2% 0,25W
3436	4822 051 10101	100Ω 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10101	100Ω 2% 0,25W
3439	4822 051 10101	100Ω 2% 0,25W
3440	4822 051 10101	100Ω 2% 0,25W
3441	4822 051 10101	100Ω 2% 0,25W
3442	4822 051 10101	100Ω 2% 0,25W
3443	4822 116 52217	270Ω 5% 0,5W
3444	4822 116 52217	270Ω 5% 0,5W
3445	4822 116 52217	270Ω 5% 0,5W
3446	4822 116 52217	270Ω 5% 0,5W
3447	4822 050 23302	3k3 1% 0,6W
3448	4822 050 23302	3k3 1% 0,6W
3455	4822 050 28209	82Ω 1% 0,6W
3475	4822 050 28209	FLMRST 82Ω
3476	4822 050 11009	FLMRST 10Ω
3477	4822 050 28209	FLMRST 82Ω
3478	4822 050 11009	FLMRST 10Ω
3479	4822 050 28209	FLMRST 82Ω
3480	4822 050 11009	FLMRST 10Ω
3483	4822 050 21002	1k 1% 0,6W
3484	4822 050 21002	1k 1% 0,6W
3485	4822 050 21002	1k 1% 0,6W
3486	4822 116 52217	270Ω 5% 0,5W
3487	4822 116 52217	270Ω 5% 0,5W
3488	4822 052 10479	47Ω 5% 0,33W
3489	4822 050 21002	1k 1% 0,6W
3490	4822 050 28209	82Ω 1% 0,6W
3491	4822 052 10479	47Ω 5% 0,33W
3492	4822 052 10479	47Ω 5% 0,33W
3493	4822 050 21002	1k 1% 0,6W
3494	4822 050 23302	3k3 1% 0,6W
3496	4822 051 10561	560Ω 2% 0,25W
3498	4822 050 26201	620Ω 1% 0,6W
3499	4822 050 11009	10Ω 1% 0,4W
3500	4822 050 28209	FLMRST 82Ω

3501	4822 050 21002	1k 1% 0,6W
3502	4822 050 23302	3k3 1% 0,6W
3504	4822 051 10561	560Ω 2% 0,25W
3506	4822 050 26201	620Ω 1% 0,6W
3507	4822 050 21003	10k 1% 0,6W
3508	4822 050 26802	6k8 1% 0,6W
3510	4822 050 21003	10k 1% 0,6W
3600	4822 050 24702	4k7 1% 0,6W
3601	4822 101 21175	50k
3603	4822 101 21176	100k
3605	4822 050 15602	5k6 1% 0,4W
3606	4822 050 15602	5k6 1% 0,4W
3607	4822 050 24703	MET FLM RES 47k
3608	4822 050 24703	MET FLM RES 47k
3609	4822 050 21002	1k 1% 0,6W
3610	4822 050 21002	1k 1% 0,6W
3611	4822 050 13303	33k 1% 0,4W
3612	4822 050 13303	33k 1% 0,4W
3613	4822 050 21002	1k 1% 0,6W
3614	4822 050 21002	1k 1% 0,6W
3615	4822 050 21002	1k 1% 0,6W
3616	4822 050 21002	1k 1% 0,6W
3617	4822 050 22202	2k2 1% 0,6W
3618	4822 050 22202	2k2 1% 0,6W
3619	4822 052 10479	47Ω 5% 0,33W
3620	4822 052 10479	47Ω 5% 0,33W
3621	4822 051 10101	100Ω 2% 0,25W
3622	4822 051 10101	100Ω 2% 0,25W
3623	4822 050 24702	4k7 1% 0,6W
3624	4822 050 24702	4k7 1% 0,6W
3625	4822 051 10561	560Ω 2% 0,25W
3626	4822 051 10561	560Ω 2% 0,25W
3627	4822 050 24702	4k7 1% 0,6W
3628	4822 050 24702	4k7 1% 0,6W
3629	4822 051 10561	560Ω 2% 0,25W
3630	4822 051 10561	560Ω 2% 0,25W
3631	4822 050 22202	2k2 1% 0,6W
3632	4822 050 22202	2k2 1% 0,6W
3637	4822 050 21002	1k 1% 0,6W
3638	4822 050 21002	1k 1% 0,6W
3639	4822 116 52234	100k 5% 0,5W
3640	4822 116 52224	470Ω 5% 0,5W
3641	4822 050 24703	47k 1% 0,6W
3645	4822 050 28209	82Ω 1% 0,6W
3646	4822 050 28209	82Ω 1% 0,6W
3647	4822 050 24702	4k7 1% 0,6W
3648	4822 050 24702	4k7 1% 0,6W
3649	4822 051 10182	1k8 2% 0,25W
3650	4822 051 10182	1k8 2% 0,25W
3651	4822 101 21177	20k
3652	4822 101 21177	20k
3653	4822 050 24702	4k7 1% 0,6W
3654	4822 050 24702	4k7 1% 0,6W
3655	4822 051 10182	1k8 2% 0,25W
3656	4822 051 10182	1k8 2% 0,25W
3657	4822 050 21801	180Ω 1% 0,6W
3658	4822 050 21801	180Ω 1% 0,6W
3659	4822 051 10101	100Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 050 25604	560k 1% 0,6W
3662	4822 050 25604	560k 1% 0,6W
3665	4822 052 10479	47Ω 5% 0,33W
3666	4822 052 10479	47Ω 5% 0,33W
3667	4822 050 15602	5k6 1% 0,4W
3668	4822 050 15602	5k6 1% 0,4W
3669	4822 050 21005	1M 1% 0,6W
3670	4822 050 21003	10k 1% 0,6W
3671	4822 116 52197	56Ω 5% 0,5W
3672	4822 050 21003	10k 1% 0,6W
3673	4822 050 21005	1M 1% 0,6W
3674	4822 050 21005	1M 1% 0,6W
3675	4822 050 23901	390Ω 1% 0,6W
3676	4822 051 10182	1k8 2% 0,25W
3677	4822 050 21003	10k 1% 0,6W
3678	4822 052 10228	2Ω2 5% 0,33W
3679	4822 053 11159	15Ω 5% 2W
3680	4822 050 23302	3k3 1% 0,6W
3693	4822 052 10478	4Ω7 5% 0,33W
3696	4822 116 52217	270Ω 5% 0,5W
3697	4822 116 52217	270Ω 5% 0,5W
3698	4822 116 52217	270Ω 5% 0,5W
3699	4822 116 52217	270Ω 5% 0,5W
3700	4822 116 52217	270Ω 5% 0,5W
3701	4822 116 52217	270Ω 5% 0,5W
3702	4822 116 52217	270Ω 5% 0,5W
3703	4822 116 52217	270Ω 5% 0,5W
3704	4822 116 52263	2k7 5% 0,5W
3705	4822 050 21002	1k 1% 0,6W
3706	4822 050 21002	1k 1% 0,6W
3708	4822 050 21002	1k 1% 0,6W
3709	4822 050 21002	1k 1% 0,6W
3710	4822 050 21002	1k 1% 0,6W
3711	4822 050 21002	1k 1% 0,6W
3714	4822 050 21002	1k 1% 0,6W
3716	4822 050 22202	2k2 1% 0,6W
3717	4822 050 22202	2k2 1% 0,6W
3718	4822 050 22202	2k2 1% 0,6W
3719	4822 050 22202	2k2 1% 0,6W
3720	4822 050 22202	2k2 1% 0,6W
3721	4822 050 22202	2k2 1% 0,6W
3722	4822 050 22202	2k2 1% 0,6W
3724	4822 050 21003	10k 1% 0,6W
3726	4822 050 21003	10k 1% 0,6W
3728	4822 050 21803	18k 1% 0,6W
3730	4822 116 52264	27k 5% 0,5W
3731	4822 116 52264	27k 5% 0,5W
3732	4822 116 52264	27k 5% 0,5W
3733	4822 116 52264	27k 5% 0,5W

3734	4822 116 52264	27k 5% 0,5W
3739	4822 050 24703	47k 1% 0,6W
3740	4822 050 24703	47k 1% 0,6W
3741	4822 050 24703	47k 1% 0,6W
3742	4822 050 24703	47k 1% 0,6W
3744	4822 050 22203	22k 1% 0,6W
3745	4822 116 52235	1M 5% 0,5W
3746	4822 050 24703	47k 1% 0,6W
3747	4822 050 21003	10k 1% 0,6W
3750	4822 050 24702	4k7 1% 0,6W
3751	4822 050 24702	4k7 1% 0,6W
3752	4822 050 24702	4k7 1% 0,6W
3753	4822 050 24702	4k7 1% 0,6W

COILS

5001	4822 146 31093	MAINS TRAFO/01
5001	4822 146 31043	MAINS TRAFO
5252	4822 157 62255	COIL
5253	4822 157 62255	COIL
5254	4822 280 70368	RELAY
5255	4822 280 70368	RELAY
5256	4822 280 70368	RELAY
5475	4822 157 63873	EBU TRAFO
5476	4822 157 63873	EBU TRAFO
5601	4822 101 21178	COIL
5602	4822 101 21178	COIL
5605	4822 242 72527	CST 4MHz

DIODES

6250	4822 130 61219	BZX79-C10
6251	4822 130 61219	BZX79-C10
6252	4822 130 61219	BZX79-C10
6253	4822 130 61219	BZX79-C10
6254	4822 130 30621	1N4148
6255	4822 130 30842	BAV21
6256	4822 130 30842	BAV21
6257	4822 130 30842	BAV21
6258	5322 130 34563	BZX79-C2V7
6259	5322 130 34563	BZX79-C2V7
6260	4822 130 80235	BZX79-C3V3
6261	4822 130 80235	BZX79-C3V3
6262	4822 130 30842	BAV21
6263	4822 130 30842	BAV21
6264	4822 130 32213	BYV28-50
6265	4822 130 32213	BYV28-50
6266	4822 130 32213	BYV28-50
6267	4822 130 32213	BYV28-50
6268	4822 130 30621	1N4148
6269	4822 130 30621	1N4148
6270	4822 130 30621	1N4148
6271	4822 130 30621	1N4148
6272	4822 130 30621	1N4148
6273	4822 130 34278	BZX79-C6V8
6274	4822 130 30621	1N4148
6275	4822 130 30621	1N4148
6276	4822 130 30621	1N4148
6277	4822 130 30621	1N4148
6278	5322 130 30684	1N4002GP
6279	5322 130 30684	1N4002GP
6280	5322 130 30684	1N4002GP
6281	5322 130 30684	1N4002GP
6282	4822 130 34281	BZX79-C15
6283	4822 130 82078	D5SBA20
6284	4822 130 82079	D3SBA20
6286	4822 130 30621	1N4148
6287	4822 130 30621	1N4148
6288	4822 130 30621	1N4148
6289	4822 130 30621	1N4148
6290	4822 130 30621	1N4148
6291	4822 130 30621	1N4148
6292	4822 130 30621	1N4148
6293	4822 130 30621	1N4148
6294	4822 130 30621	1N4148
6295	4822 130 30621	1N4148
6296	4822 130 30621	1N4148
6298	4822 130 34281	BZX79-C15
6299	4822 130 30621	1N4148
6301	4822 130 34499	BZX79-C20
6302	4822 130 34268	BZX79-C16
6303	4822 130 30621	1N4148
6304	4822 130 30621	1N4148
6305	4822 130 30621	1N4148
6401	4822 130 31253	BZX79-C2V4
6475	4822 130 30621	1N4148
6476	4822 130 30621	1N4148
6477	4822 130 34173	BZX79-C5V6
6478	4822 130 34268	BZX79-B16
6601	4822 130 30621	1N4148
6603	4822 130 30621	1N4148
6604	4822 130 34278	BZX79-C6V8
6605	4822 130 34278	BZX79-C6V8
6606	4822 130 30621	1N4148
6607	4822 130 30621	1N4148
6608	4822 130 30621	1N4148
6609	4822 130 34499	DIODE BZX79 C20
6610	5322 130 30684	1N4002
6611	4822 130 30621	1N4148
6612	4822 130 34233	BZX79-C5V1
6613	4822 130 31253	BZX79-C2V4
6614	4822 130 34167	BZX79-C6V2
6615	4822 130 34174	BZX79-C4V7
6616	4822 130 34167	BZX79-C6V2
6617	4822 130 34499	DIODE BZX79 C20
6632	4822 130 30621	1N4148

6692	5322 130 34834	BZX79-C3V6
6693	5322 130 34834	BZX79-C3V6
6700	4822 130 81254	GP1U520X
6701	4822 130 30621	1N4148
6702	4822 130 30621	1N4148
6703	4822 130 30621	1N4148
6704	4822 130 30621	1N4148
6705	4822 130 30621	1N4148
6706	4822 130 30621	1N4148

Transistors & IC's

7250	4822 130 40937	BC548B
7251	4822 130 40937	BC548B
7252	4822 209 80891	MHz 78M05CT
7255	4822 209 83274	NJM4560D
7256	4822 130 41691	BC556B
7257	4822 130 41691	BC556B
7258	5322 130 44413	BF457
7259	5322 130 44413	BF457
7260	4822 130 40937	BC548B
7261	4822 130 40937	BC548B
7262	4822 130 44503	BC547C
7263	4822 130 44503	BC547C
7264	4822 130 40937	BC548B
7265	4822 130 40937	BC548B
7266	4822 130 44197	BC558B
7267	4822 130 44197	BC558B
7268	4822 130 62954	2SD1895
7269	4822 130 62954	2SD1895
7270	4822 130 62953	2SD1255
7271	4822 130 62953	2SD1255
7272	4822 130 62953	2SD1255
7273	4822 130 62953	2SD1255
7274	4822 130 62953	2SD1255
7275	4822 130 62953	2SD1255
7276	4822 130 40937	BC548B
7277	4822 130 44461	BC546B
7279	4822 130 44461	BC546B
7280	4822 130 44461	BC546B
7281	4822 130 62952	BDT61F
7282	4822 130 40824	BD136
7283	4822 130 40937	BC548B
7284	4822 130 40937	BC548B
7285	4822 130 40937	BC548B
7286	4822 130 40941	BC558
7287	4822 130 40937	BC548B
7401	4822 209 73064	NJM2068D-D
7402	4822 209 72748	LC7821
7403	4822 209 72748	LC7821
7475	4822 209 71339	TC9164N
7476	5322 209 11323	PC74HCU04P
7477	5322 209 11323	PC74HCU04P
7478	4822 130 44196	BC548C
7479	4822 130 40823	BD135
7601	4822 130 40937	BC548B
7602	4822 130 40937	BC548B
7603	4822 209 30941	NJM2068D
7604	4822 130 40937	BC548B
7605	4822 209 10263	HEF4052BP
7607	4822 130 40937	BC548B
7608	4822 130 40937	BC548B
7609	4822 209 83274	NJM4560D
7610	4822 209 63667	BA6229
7611	5322 130 42216	TL081CP
7612	4822 130 44197	BC558B
7631	4822 130 40937	BC548B
7633	4822 130 40937	BC548B
7636	4822 130 40937	BC548B
7639	4822 130 44197	BC558B
7640	4822 130 40937	BC548B
7641	4822 130 40937	BC548B
7642	4822 130 40937	BC548B
7643	4822 130 40937	BC548B
7644	4822 130 40937	BC548B
7645	4822 130 40937	BC548B
7646	4822 130 40937	BC548B
7647	4822 209 61522	PC74HCT4094P
7648	4822 209 61522	PC74HCT4094P
7649	4822 209 30882	NM93C13BN
7650	4822 209 30881	IC

6633	4822 130 30621	1N4148
6634	4822 130 30621	1N4148
6635	4822 130 82978	LED
6636	4822 130 82978	LED
6637	4822 130 82978	LED
6638	4822 130 82978	LED
6639	4822 130 82978	LED
6640	4822 130 82978	LED
6641	4822 130 82978	LED
6642	4822 130 82978	LED
6643	4822 130 82978	LED
6644	4822 130 82978	LED
6645	4822 130 82978	LED
6646	4822 130 82978	LED
6647	4822 130 82978	LED
6648	4822 130 82978	LED
6690	5322 130 34834	BZX79-C3V6
6691	5322 130 34834	BZX79-C3V6
6692	5322 130 34834	BZX79-C3V6
6693	5322 130 34834	BZX79-C3V6
6700	4822 214 52009	GP1U58XP
6701	4822 130 30621	1N4148
6702	4822 130 30621	1N4148
6703	4822 130 30621	1N4148
6704	4822 130 30621	1N4148
6705	4822 130 30621	1N4148
6706	4822 130 30621	1N4148

TRANSISTORS & IC's

7250	4822 130 40937	BC548B
7251	4822 130 40937	BC548B
7252	4822 209 80891	78M05CT
7255	4822 209 83274	NJM4560D
7256	4822 130 41691	BC556B
7257	4822 130 41691	BC556B
7258	4822 130 43283	2SC2705
7259	4822 130 43283	2SC2705
7260	4822 130 60117	2SC3419
7261	4822 130 60117	2SC3419
7262	4822 130 44503	BC547C
7263	4822 130 44503	BC547C
7264	4822 130 40937	BC548B
7265	4822 130 40937	BC548B
7266	4822 130 44197	BC558B
7267	4822 130 44197	BC558B
7268	4822 130 62954	2SD1895
7269	4822 130 62954	2SD1895
7270	4822 130 62953	2SD1255
7271	4822 130 62953	2SD1255
7272	4822 130 62953	2SD1255
7273	4822 130 62953	2SD1255
7274	4822 130 62953	2SD1255
7275	4822 130 62953	2SD1255
7276	4822 130 40937	BC548B
7277	4822 130 44461	BC546B
7279	4822 130 44461	BC546B
7280	4822 130 44461	BC546B
7281	4822 130 62952	BDT61F
7282	4822 130 40824	BD136
7283	4822 130 40937	BC548B
7284	4822 130 40937	BC548B
7285	4822 130 40937	BC548B
7286	4822 130 40941	BC558
7287	4822 130 40937	BC548B
7288	4822 130 60117	2SC3419
7401	4822 209 73064	NJM2068D-D
7402	4822 209 72748	LC7821
7403	4822 209 72748	LC7821
7475	4822 209 71339	TC9164N
7476	5322 209 11323	IC N74HCU04N
7477	5322 209 11323	IC N74HCU04N
7478	4822 130 44197	BC558B
7479	4822 130 40823	BD139
7601	4822 130 40937	BC548B
7602	4822 130 40937	BC548B
7603	4822 209 30941	NJM2068D
7604	4822 130 40937	BC548B
7605	4822 209 10263	HEF4052BP
7607	4822 130 40937	BC548B
7608	4822 130 40937	BC548B
7609	4822 209 83274	NJM4560D
7610	4822 209 63667	BA6229
7611	5322 130 42216	TL081CP
7612	4822 130 44197	BC558B
7631	4822 130 40937	BC548B
7633	4822 130 40937	BC548B
7636	4822 130 40937	BC548B
7639	4822 130 44197	BC558B
7640	4822 130 40937	BC548B
7641	4822 130 40937	BC548B
7642	4822 130 40937	BC548B
7643	4822 130 40937	BC548B
7644	4822 130 40937	BC548B
7645	4822 130 40937	BC548B
7646	4822 130 40937	BC548B
7647	5322 209 11532	IC 74HC4094P
7648	5322 209 11532	IC 74HC4094P
7649	4822 209 30882	NM93C13BN
7650	4822 209 30881	IC

PHILIPS

PHILIPS

SI Wichtig für die Werkstatt!

Sachgebiet: AC 51 HiFi

Nummer: 51081

Datum: 23.11.1994

Service Information

Betrifft: HiFi-Verstärker 70FA930
Reparatur der Endstufen

Verteiler: INTERN und EXTERN

Um Endstufen-Ausfällen vorzubeugen, sind im Verlauf der Fertigung eine Reihe von Änderungen vorgenommen und mit Service Information mitgeteilt worden.
Unter anderem wurde in diesem Zusammenhang bei Geräten mit Fertigungsdatum ab KW9232 ein anderer Temperatur-Sensor auf einem neuen Print "Power Unit" eingeführt.

Mit dieser Information werden die für die Reparatur relevanten Hinweise zusammengefaßt.

Bei der Reparatur ausgefallener Endstufen ist - insbesondere bei Verstärkern mit Fertigungsdatum vor KW9232 - darauf zu achten, daß (sofern nicht bereits geschehen) die folgenden Maßnahmen durchgeführt werden:

* Temperatur-Sensor TS7260, 7261 (BC548B) ändern in 2SC3419-Y.
  7260, 7261 2SC3419-Y 4822 130 60117
  Der neue Transistor wird auf dem Kühlblock festgeschraubt.
  Achtung! Beim neuen Transistor sind gegenüber BC548 die Anschlüsse für Basis und Kollektor vertauscht!

* Zwischen Kollektor und Emitter der Transistoren 7260 und 7261 - möglichst nah am Transistor - je einen Elko 100uF/10V einfügen (Plus des Elkos an Kollektor).
  2301, 2302 100uF/10V 4822 124 41584

* Zwischen Kollektor und Emitter der Transistoren 7272 und 7273 je einen Kondensator 100pF/50V einfügen.
  100pF/50V 4822 122 33195

* Bei Verstärkern, die mit einer defekten Endstufe zur Reparatur gegeben werden, stets im Rahmen der Reparatur auch die Transistoren des (noch) fehlerfreien Kanals auswechseln.

* Beim Einbau der neuen Endtransistoren und des Temperatur-Sensors ist durch ausreichend Wärmeleitpaste für guten Temperatur-Kontakt zum Kühlblock zu sorgen.
  Wärmeleitpaste DC340 5322 390 20019

4812 829 51081

Form 80048

Nachdruck nicht gestattet! Änderungen vorbehalten.

* Nur bei Anschluß von Lautsprechern mit ausgeprägt kapazitivem Verhalten:
  Je eine Brücke über die Spulen 5252 und 5253 legen.
  Anmerkung: Diese Maßnahme ist bei Anschluß "normaler" Lautsprecher, dazu gehören z.B. alle Philips-Boxen, nicht erforderlich.

Die vorübergehend zur Verbesserung der Wärmeleitung zwischen Kühlblock und Temperatur-Sensor eingebauten Andruckbleche (4822 466 82991) sind inzwischen fortgefallen; mit dem neuen Sensor 2SC3419-Y brauchen sie nicht mehr eingebaut zu werden.

PHILIPS

SI Wichtig für die Werkstatt!

Nummer: 51052

Sachgebiet: AC 51 HIFI

Datum: 25.02.1993

Service Information

Betrifft: Hifi-Verstärker 70FA930

Verteiler: INTERN UND EXTERN

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1. Um zu verhindern, daß auf dem PCB "Volume Unit" die Z-Diode 6616 überlastet wird, ist diese bei Geräten mit Wochencode ab 9250 ersetzt worden durch eine Reihenschaltung von 3 Stück Z-Dioden BZX79C2V4.

   BZX79C2V4 4822 130 31253

   Bei Ausfall der Z-Diode 6616, ist die o. gen. Änderung im Rahmen der Reparatur wie folgt durchzuführen (s. Anhang):

   6616 (BZX79C6V2) ersetzen durch BZX79C2V4.

   Drahtbrücken 9762 und 9689 entfernen und stattdessen je eine Z-Diode BZX79C2V4 (6620 bzw. 6621) einsetzen.

2. Bei besonderer Belastung kann es zum Unterbrechen der Thermosicherung im Netztransformator kommen.
   Für solche Fälle ist ein neuer Trafo 5001 mit einer Thermosicherung mit Auslösetemperatur 150 C lieferbar.

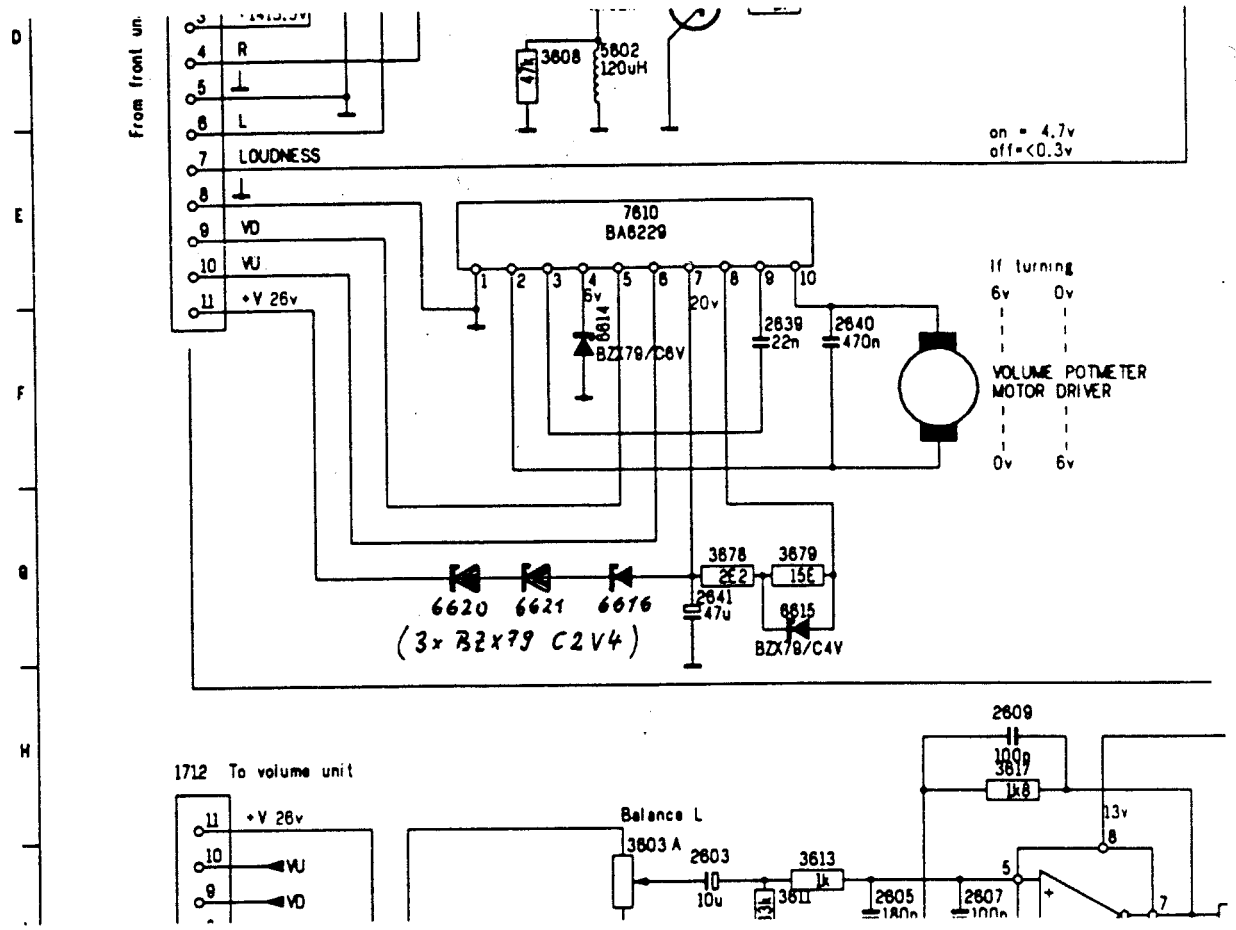
   5001 mit Thermosich. 150 C 4822 146 31225

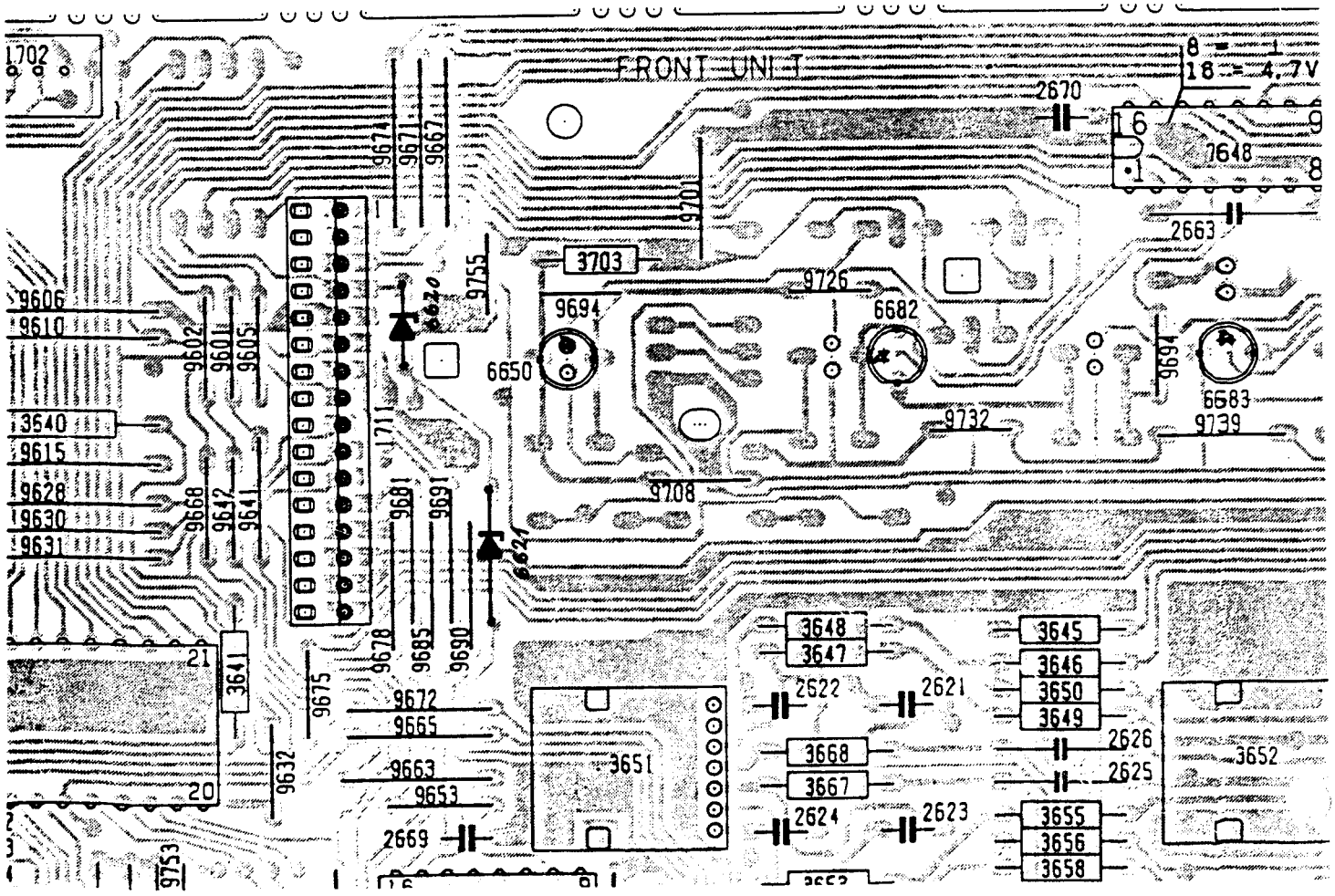
   Bei Verstärkern mit Wochencode ab KW 9303 ist der neue Transformator bereits ab Fabrik eingebaut.

8412 829 51052

Form 80048

Nachdruck nicht gestattet! Änderungen vorbehalten.


From front un
R
L
LOUDNESS
VD
VU
+V 26v
3608
5602
120uH
on = 4.7v
off=<0.3v
7610
BA6229
1 2 3 4 5 6 7 8 9 10
5v
20v
6814
BZX79/C8V
2639
22n
2640
470n
If turning
6v 0v
VOLUME POTMETER
MOTOR DRIVER
0v 6v
3678
2E2
3679
15E
6620 6621 6676
2641
47u
6615
BZX79/C4V
(3x BZX79 C2V4)
1712 To volume unit
+V 26v
VU
VD
Balance L
3603 A
2603
10
10u
3613
1k
3611
2605
2607
2609
3617
1k8
13v


FRONT UNIT
1702
1711
8 = 1
18 = 4.7V
2670
7648
2663
3703
9726
9694
6682
6650
6620
6621
9755
9701
9732
9739
9708
6683
9606
9610
9602
9601
9605
3540
9615
9628
9630
9631
9668
9642
9641
9678
9681
9685
9690
9675
9672
9665
9663
9653
9632
3641
2669
3651
3648
3647
2622
2621
3668
3667
2624
2623
3645
3646
3650
3649
2626
2625
3655
3656
3658
3652
9753

Service
Service
Service

Product Service Group CE Audio

Service Information

70FA930

In order to prevent early failure of powertransistors following changes are necessary :
-Add two electrolytic capacitors 100µF 10V (items 2301,2302) service codenumber 4822 124 41584 across **Collector** and **Emitter** of transistor 7260 (right channel) and 7261 (left channel) with the positive side of the capacitor connected to the collector. see fig. 1 or fig. 2
-*The most practical way to connect the two capacitors is to mount them at the coppertrack side.

There are two versions of sensing transistor 7260,7261 :
From production start the transistor is BC548B. see fig. 1

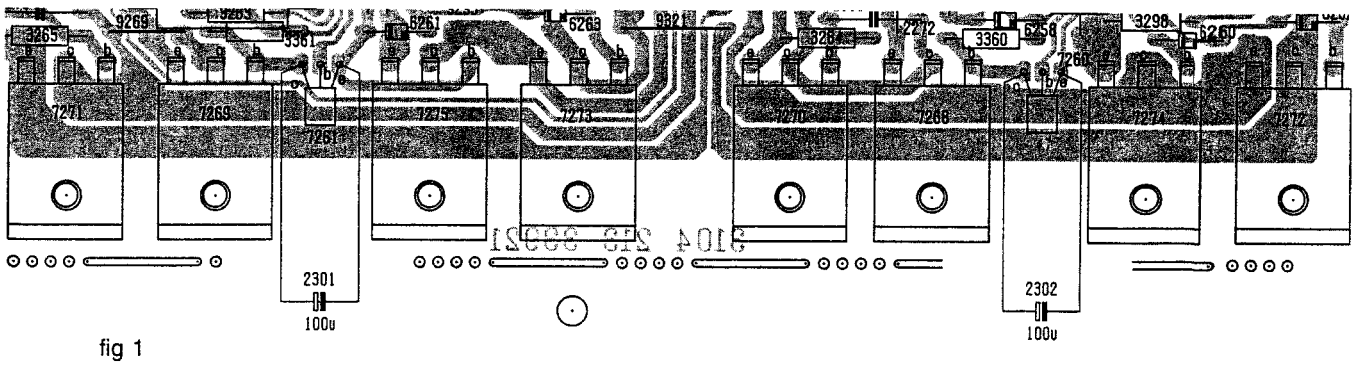


fig 1

From week 9232 another transistor type 2SC3419 is used. see fig. 2
This transistor has a TO-126 housing and is screwed on the heatsink.

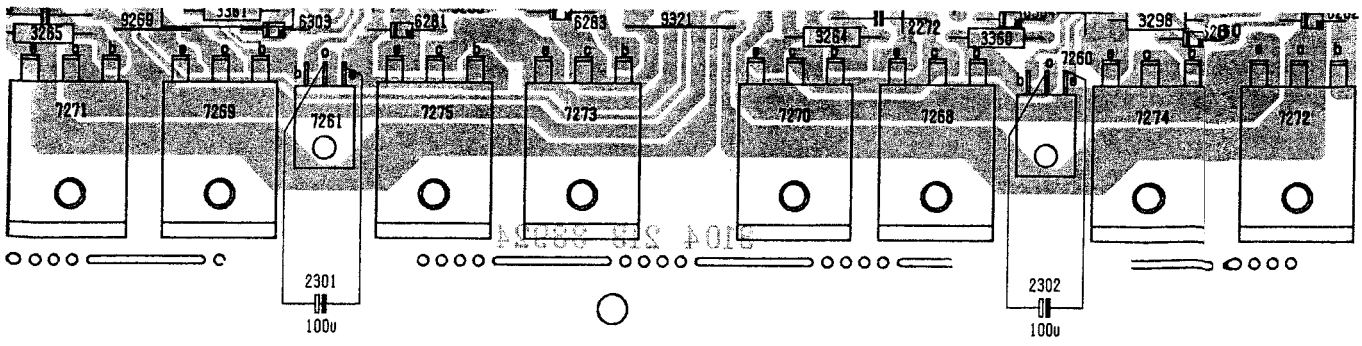
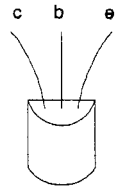
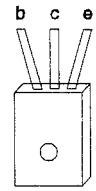


fig 2

The difference between both transistor versions is important for the connection of the capacitor on collector and emitter because the pinning of the transistors is different.



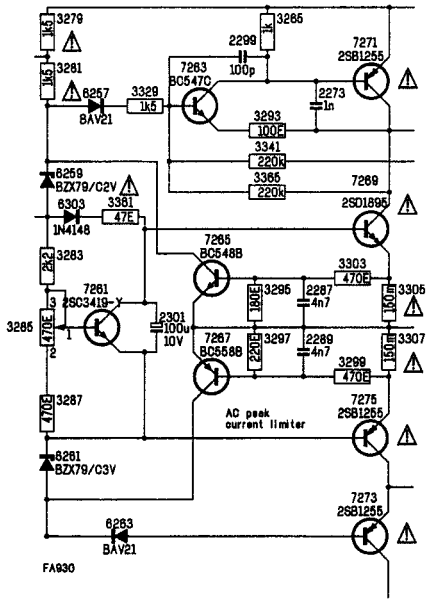
BC548

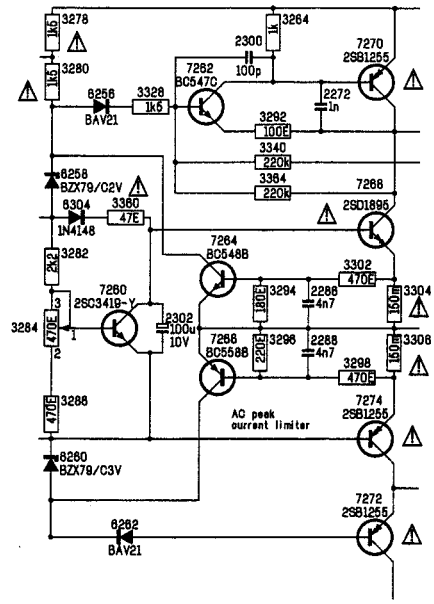


2SC3419

Remarks:
It is necessary that in **every** set which needs to be repaired,no matter the complaint,the above mentioned changes are introduced.If the repair is a defective powerendstage than it is also necessary that new powertransistors are soldered in both left and right channel.
The powertransistors to be replaced are:

items	Type	servicecodenumber
7268-7269	2SD1895	4822 130 62954
7270-7271	2SB1255	4822 130 62953
7272-7273	2SB1255	4822 130 62953
7274-7275	2SB1255	4822 130 62953





***For sets produced in week 9313 and later both capacitors are already assembled.**

***For sets produced before week 9313 it is possible that these capacitors are already added in some service centres.This can be seen at the elco added between collector emitter of transistor 7260 and 7261 at the solderside of the power print.**